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THE IMPACT OF A TEACHER EDUCATOR'S MEDIATIONAL STRATEGIES ON A NOVICE TEACHER'S DEVELOPMENT OF PEDAGOGICAL CONCEPTS

**FLORIANÓPOLIS** 

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The Impact of a Teacher Educator's Mediational Strategies on a Novice Teacher's Development of Pedagogical Concepts

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Certificamos que esta é a **versão original e final** do trabalho de conclusão que foi julgado adequado para obtenção do título Doutor em Inglês: Estudos Linguísticos e Literários, na área de concentração Estudos da Linguagem.

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#### **RESUMO**

No campo de formação de professores de inglês como Língua Estrangeira, os formadores de professores têm um papel fundamental: orientar, mentorear, desafiar e apoiar o desenvolvimento dos conceitos pedagógicos dos professores. Este estudo, que seguiu um dos principais princípios da Teoria Sociocultural de Vygotsky (1987), denominado mediação, teve como objetivo estudar como as estratégias de mediação do formador de professores impactaram no desenvolvimento pedagógico de um professor. Para tanto, foram utilizadas diferentes tipos de estratégias, sendo mais ou menos implícitas ou explícitas. A questão norteadora que permeou este estudo foi: "Em que medida a configuração de mediação fornecida por um formador de professores impacta no desenvolvimento do professor?" Para responder a esta questão geral, são colocadas três questões específicas: Q1: "Quais aspectos pedagógicos foram abordados ao longo das oito sessões de mediação?"; Q2: Quais estratégias de mediação são utilizadas pelo formador de professores para mediar o professor ao longo das oito sessões de mediação?"; e Q3: "Podemos traçar uma relação entre os aspectos pedagógicos desenvolvidos pelo professor e as estratégias utilizadas pelo formador de professores? Se sim, como é essa relação?". Os dados foram coletados por meio de observação de aulas e sessões de feedback (chamadas sessões de mediação), ambas filmadas, e sua análise empregou métodos de pesquisa qualitativa. A análise revelou que: em primeiro lugar, respondendo à Q1, foram analisados quatro aspectos pedagógicos (contextualização, links, instruções e modelação); Em segundo lugar, abordando a Q2, a formadora de professores usou principalmente 8 estratégias, variando em termos de implicitação e explicitação: i) Estratégias implícitas (extrair o raciocínio do professor e fazer perguntas para apoiar a opinião do especialista); ii) Estratégias explícitas indiretas (relembrar o que aconteceu na aula; nomear o conceito e ler do material); e iii) Estratégias Explícitas (Dar exemplos / sugestões/ Dizer o que deve ser feito; Explicar/ esclarecer o conceito; e Mostrar as orientações sugeridas no guia do professor); em terceiro lugar, em relação à Q3, os resultados mostraram que a formadora de professores empregou predominantemente estratégias implícitas (39,4% das vezes) em detrimento das explícitas (24,2%), para os conceitos que apresentaram um desenvolvimento mais precoce e mais fácil (contextualização e links), com estratégias explícitas indiretas sendo as mais frequentes (41,25%). Por outro lado, para os conceitos que apresentaram um desenvolvimento posterior e mais desafiador (instruções e modelagem), o formador de professores usou estratégias modestamente mais explícitas sobre implícitas (31,75% de explicitação sobre 27% de implicitude), novamente com estratégias

explícitas indiretas os mais frequentes (37,8%). Finalmente, respondendo à principal questão de pesquisa do estudo, os resultados indicam que as sessões de mediação impactaram a trajetória do desenvolvimento do professor, mas sem nenhuma diferença significativa entre estratégias implícitas ou explícitas para o desenvolvimento anterior ou posterior. Os resultados deste estudo corroboram a proposição de Vygotsky (1987) sobre a importância da mediação no desenvolvimento de conceitos.

Palavras-chave: Formação de professores. Desenvolvimento de conceito. Mediação.

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#### **ABSTRACT**

In the field of English as a Foreign Language (EFL) teacher education, Teacher educators have a key role: of guiding, mentoring, challenging and supporting the development of teachers' pedagogical concepts. This study, which followed one on the main tenets of Vygotsky's (1987) Sociocultural theory (VSCT), namely, mediation, aimed to study how the teacher educator's mediational strategies impacted in the development of a teacher's pedagogical development. To this end, different kinds of strategies were used, ranging from more or less implicit or explicit. The guiding question that permeated this study was: "To what extent does the mediation configuration provided by a teacher educator impact teacher development?" In order to answer this general question, three specific questions were posed: RQ1: "Which pedagogical aspects have been approached along the eight mediating sessions?"; RQ2: What mediating strategies are used by the TE to mediate the teacher along the eight mediating sessions?"; and RQ3: "Can we draw a relationship between the pedagogical aspects developed by the teacher and the strategies used by the TE? If so, what does this relationship look like?". Data were collected through filmed class observation sessions and filmed feedback sessions (called mediating sessions), and their analysis employed qualitative research methods. The analysis showed that: Firstly, answering RQ1, four pedagogical aspects were analyzed (contextualization, links, instructions and modeling); Secondly, addressing RQ2, the teacher educator used mainly 8 strategies, ranging in terms of implicitness and explicitness: i) Implicit Strategies (Eliciting teacher's reasoning and Asking questions to support expert's opinion; ii) Indirect Explicit Strategies (Recalling what happened in class; Naming the concept and Reading from the material; and iii) Explicit Strategies (Giving examples/ suggestions/ Saying what should be done; Explaining/ clarifying the concept; and Showing the suggested guidelines on the teacher's guide.); thirdly, regarding RQ3, results showed that the teacher educator predominantly employed implicit strategies (39,4% of times) over explicit ones (24,2%), for the concepts that showed an earlier and easier development (contextualization and links), with indirect explicit strategies being the most frequent ones (41,25%). On the other hand, for the concepts that presented a later and more challenging development (instructions and modeling), the teacher educator modestly used more explicit strategies over implicit ones (31,75% explicitness over 27% implicitness), again with indirect explicit strategies the mostly frequent (37.8%). Finally, answering the study's main research question, results indicate that the mediating sessions impacted the teacher's developmental path, but with no significant difference between implicit or explicit

strategies for earlier or later development. The results of this study corroborate Vygotsky's (1987) proposition concerning the importance of mediation in the development of concepts.

Key-words: Teacher education. Concept development. Mediation.

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# LIST OF PICTURES

Picture 1: Bottom-up and Top-down movements in concept development	38
Picture 2: Framework on different aspects of teacher cognition - schooling, professional education, con	ntextual
factors and classroom practice	51

## LIST OF TABLES

Table 1: Categorization of mediational strategies in terms of implicitness-explicitness	71
Table 2: Categorization of mediational strategies in terms of frequency	72
Table 3: Categorization of mediational strategies in terms of implicitness-explicitness	74
Table 4: Categorization of mediational strategies in terms of frequency	76
Table 5: Transcription conventions used when transcribing the classes and interactions presented in this st	udy.76
Table 6: Frequency of strategies employed in the pedagogical aspect Instructions	94
Table 7: Frequency of strategies employed in the pedagogical aspect Modeling	112
Table 8: Frequency of strategies employed in the pedagogical aspect Contextuxtualization	129
Table 9: Frequency of strategies employed in the pedagogical aspect Link	146
Table Table 10: Summary of the frequency of strategies used	147

#### LIST OF ACRONYMS

ESL English as a Second Language

**TED Teachaer Education** 

VSCT Vygotsky's Sociocultural Theory

ZPD Zone of Proximal Development

ZAD Zone of Actual Development

DA Dynamic Assessment

L2 Target language

IDZ Intermental Development Zone

DA Dynamic Assessment

**DVP** Dialogic Video Protocols

SLT Second language Teaching

PPK Personal Practice Knowledge

BAK Beliefs, Attitudes, Knowledge

CEFR Common European Framework of Reference

ABF Associação Brasileira de Franchising

LI Language Institute

TAF Task Analysis Framework

TEP Teacher Education Program

MS Mediating Sessions

**COF Class Observation Form** 

CAAE Certificado de Apresentação de Apreciação Ética

TBLT Task Based Language Teaching

# TABLE OF CONTENTS

1	INTRODUCTION	15
1.1	DEFINITION OF THE PROBLEM	15
1.2	CONTEXT OF INVESTIGATION	18
1.3	SIGNIFICANCE OF THE RESEARCH.	18
1.4	OBJECTIVE OF THE STUDY AND RESEARCH QUESTIONS	19
1.5	ORGANIZATION OF THE THESIS	20
2	REVIEW OF LITERATURE	22
2.1	SOCIOCULTURAL THEORY: A THEORY OF THE MIND	22
2.1.1 education	Mediation, Internalization, Concept formation and ZPD and their relation to teacon	
2.1.1.1	Mediation: the world affecting us	26
2.1.1.2	Internalization: from the world to us	32
2.1.1.3	Concept Development: how we understand the world around us	35
2.1.1.4	Zone of Proximal Development: our potential world	40
2.1.2	Dynamic Assessment: the developmental analysis of one's potential world	45
2.2	TEACHER COGNITION	49
2.3	SUMMARY OF THE CHAPTER	57
3	METHOD	59
3.1	INTRODUCTION	59
3.2	NATURE OF THE STUDY	59
3.3	OBJECTIVES OF THE STUDY	61
3.3.1	Research questions	62
3.4	CONTEXT OF INVESTIGATION	62
3.4.1	Setting: Language Institute, classes and pedagogical guidelines	62
3.4.2	Participants	67
3421	Criteria for participant's selection	67

3.4.2.2	The novice teacher	7
3.4.2.3	The teacher educator6	8
3.5	DATA COLLECTION6	9
3.5.1	Procedures	9
3.6	DATA ANALYSIS	0
3.6.1	Mediating sessions	0
3.6.2	Nature of the analysis and analysis criteria	1
3.6.3	Analysis procedure	2
3.7	ETHICS REVIEW BOARD	3
4	ANALYSIS	4
4.1	INSTRUCTIONS	7
4.2	MODELING 9	6
4.3	CONTEXTUALIZATION	4
4.4	LINKS	1
4.5	OVERVIEW OF THE ANALYSIS	9
5	FINAL REMARKS	2
5.1	INTRODUCTION	2
5.2	MAIN FINDINGS	2
5.3	LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTUR	E
RESEA	RCH	9
5.4	PEDAGOGICAL IMPLICATIONS	0
	REFERENCES	2
	APPENDIXES	
	APPENDIX A – Task Analysis Framework model	4
	APPENDIX B – Class Observation Forms	5
	APPENDIX C – Consent Forms	1

#### 1 INTRODUCTION

#### 1.1 DEFINITION OF THE PROBLEM

The English as a Second Language (ESL)<sup>1</sup> teacher education (TED) area has gone through a dramatic change since the 1980's, with the declining of a more positivistic view on language teaching and the emergence of cognitivist and social theories to learning, which obviously also resulted in a shift in teacher education. Changes in language teacher education include exposing teachers to pedagogical issues and reflections considering their views instead of simply offering training programs on how to conduct a certain method, deprived of theoretical foundations and regardless of participants' rationales. In these pre-service actions, pedagogical theory is presented and practiced, ideally providing teachers with knowledge and skills necessary to conduct their future practice. This bridging of theory and practice, however, has traditionally been a challenge both for teachers and teacher educators who deliver these pre-service programs.

In this respect, there is a vast body of research dealing with the importance of teacher educators' assistance on teachers' pedagogical learning paths (ABRAHÃO, 2002; BORG, 2003; DELLAGNELO, 2007; JOHNSON, 1999, 2015; ONG'ONDO; BORG, 2011; RICHARDS, 1991; SCHÖN, 1988, to cite a few), whose bulk is on the way teachers develop pedagogical concepts in a certain time span, with a certain kind of assistance, in a certain academic background, and so on.

Typically, these studies focus on the teachers and their developmental changes. Nevertheless, teacher educators and their practice, their role and the impact of their activity on the development of teachers along their professional life are often times overlooked. As a teacher educator myself, I can think of some reasons for this lack of studies on our own trajectories while mentoring; one reason might be that "opening ourselves up for scrutiny", as Johnson and Golombek (2016) mention, is neither easy nor comfortable. Realizing one's own

<sup>&</sup>lt;sup>1</sup> We acknowledge that there are different terminologies used in English Language Teaching (ELT), such as English as Foreign Language (EFL), English as Lingua Franca (ELF), however, for the sake of this study, we decided to use ESL to refer to the area in general, encompassing all these scenarios/views.

flaws and opening them for scrutiny stirs our egos; yet, I see this neglect as a shortcoming of the area that needs to be overcome. Becoming mindful of our own pedagogical trajectory in the shoes of a teacher educator may bring up a higher level of awareness, "a more nuanced understanding of our work, and a mindfulness of what, how, and why we do what we do and its consequences on and for our teachers" (JOHNSON; GOLOMBEK, 2016, p. 163). The aforementioned authors also point out that becoming a mindful teacher educator requires a great level of "reflexivity, sensitivity, and specialized expertise" (p. 164), which may be difficult to achieve at times, due to the intricate nature of pedagogical reflection, as well as to its time-consuming quality. Teacher educators are often overburdened with pedagogical affairs concerning school settings, and thus lack time to focus on their own practice.

Following Vygotsky's Sociocultural Theory (VSCT), one way of enabling teacher educators to help teachers in their pedagogical development might be via *mediation*, which, according to Vygotsky (1980), is the process of understanding the world through our lenses, built on interactions in culturally and historically defined scenarios, where an expert other may play the role of mediating knowledge so one can understand and then internalize it. Hence, one factor that may optimize teachers' developmental process is the assistance from a more knowledgeable other (a teacher educator or another peer) who invariably guides them into looking at their practice, both retrospectively (analyzing their practice), or prospectively (sharing class plans, for instance), with the intent of reflecting on the extent to which the pedagogical choices made in or toward their classes have been carried out in an effective way for the purposes meant. In this sense, it is also paramount to analyze mediation through teacher educators' lenses, as the source of the development that teachers undergo.

Notably, the quality of mediation depends on the mediator's knowledge and perception of the *mediatee's* Zone of Proximal Development (ZPD). Vygotsky (1980) explains that one has two levels of knowledge: the actual level of development (Zone of Actual Development- ZAD), and the potential level of knowledge (ZPD), which can be reached with the aid of others. Some important characteristics of ZPDs are that they are transitory, shaped by the process under which we go through, and thus, are constantly reorganized. Hence, teacher educators need to adapt the mediation according to teachers' dynamic ZPD, realizing the extent to which the new information can (or not) be grasped, not being too easy (within one's ZAD), nor too difficult (beyond one's ZPD).

This practice may be called responsive mediation, which, according to Johnson and Golombek (2016) "emerges during systematic instruction aimed at the ceilings of teachers'

ZPDs and supports the emergence of new meanings, enabling teachers to gain increasing control over true concepts that regulate their teaching activity and burgeoning teaching expertise." (p. 165). The main characteristics of responsive mediation are that it is dynamic, emergent, and contingent, that is, shifting along the path, not fixed, open to change as the mediatee starts gaining control over the concepts presented, and restricted to the mediatee's needs. As Johnson and Golombek (2016) state, "We need to be mindful of the consequences of our pedagogy on how teachers come to understand both the scope and impact of their teaching" (p. 164). Aligned with this perspective, Poehner, based on Vygotsky's ideas, came up with a way of assessing and promoting development through dialogic mediation, called Dynamic Assessment (DA). In a nutshell, in DA, the mediation is not prefabricated by the mediator; instead, it is negotiated with the mediatee, that is, "continually adjusted in accordance with the learner's responsivity" (LANTOLF & POEHNER, 2010, p. 318). In this vein, the teacher educator needs to take into consideration teachers' pedagogical preunderstandings, guide them into developing the concepts at hand, as well as attend to how they are feeling about their learning, the emotional experience they have towards what is being learned (what Vygotsky called perezhivanie).

As far as the quality of mediation is concerned, Wertsch (2007) proposes two kinds of mediation: explicit and implicit. According to the author, explicit mediation involves "the intentional and overt presentation of a tool (physical or symbolic), aiming at provoking another person and making them think and act accordingly" (BIEHL, 2016). On the other hand, implicit mediation happens when a mediational artifact, either physical (i.e. a teacher's manual), or psychological (i.e. language) unintentionally triggers one's insight. Nevertheless, as pointed out by Biehl (2016), in teacher education it is very common that the mediator guides the *mediatee* into reasoning upon a certain pedagogical aspect without explicitly telling them how to conduct a given activity, aiming at fostering them to make meanings by themselves. This kind of mediation will be referred to in this study as *intentional implicit mediation*.

Overall, being aware of the mediational configuration one employs may promote teacher educators' consciousness of the impact their mediation plays in teachers' pedagogical learning paths.

#### 1.2 CONTEXT OF INVESTIGATION

This study builds on my master thesis, which aimed at tracing the development of pedagogical concepts of a novice English teacher during her first four months as a teacher in a Language Institute. At that time, despite considering the development of pedagogical concepts of paramount importance to the teacher education area, due to the restriction in size and scope of a Master's thesis, I could not expand it to examine the quality of mediation I provided.

At that moment, what could be perceived was that some pedagogical concepts were more promptly and easily understood and developed than others. In the present study, the idea is to speculate into the kind of mediation provided by the teacher educator (TE) when interacting with the teacher in the MA study, so as to understand the reasons why some concepts were more swiftly grasped, whether there is a specific mediational configuration that is more robust and more productive in creating new zones of proximal development, in turning *pseudoconcepts* into concepts, and at last, in promoting teachers' self-regulation.

#### 1.3 SIGNIFICANCE OF THE RESEARCH

Studies in teacher education under a Vygotskian sociocultural approach have been carried out for over 25 years, focusing on the development of teachers (AGNOLETTO; DELLAGNELO, 2018; ALJAAFREH; LANTOLF, 1994; ARSHAVSKAYA, 2014; BIEHL; DELLAGNELO, 2016, 2017, in press; DALLIGNA, 2017; DALLA COSTA, 2019; JOHNSON; ARSHAVSKAYA, 2011; JOHNSON; DELLAGNELO, 2013; RUMKE-RAMOS, 2018; SMAGORINSKY; COOK; JOHNSON, 2003; YOSHIDA, 2011, to mention but a few), trying to bridge the dissociation between theory and practice by means of mediating teachers' learning as they engage in learning-to-teach and real teaching experiences. According to Johnson and Golombek

We firmly believe that learning to teach should not be a process of 'discovery learning' or 'learning by doing', but rather learning that is intentional, deliberate, and goal-directed by expert teacher educators who are skilled at moving teachers toward more theoretically and pedagogically sound instructional practices and greater levels of professional expertise (JOHNSON & GOLOMBEK, 2016, p. 3)

Fewer studies, however, have been focusing on the role teacher educators play in teachers' developmental process (GOLOMBEK, 2011; DAVIN, HERAZO & SAGRE, 2016; JOHNSON & GOLOMBEK, 2016; MCNEIL, 2018, to name but a few), and, to the best of my knowledge, no study has been conducted in order to trace the impact of a teacher

educator's mediational strategies on a teacher's development of pedagogical aspects, (In this study, pedagogical aspects and pedagogical concepts are used interchangeably.

One of the difficulties of being a teacher educator is to perceive what kind of mediation may have a more effective impact on a teacher's understanding, learning and internalization of pedagogical concepts. For the scope of this study, *responsive mediation* refers to a process of engagement a teacher and a teacher educator (the more knowledgeable other) undertake, along the teacher's classes' feedback sessions (named in this research *mediation sessions*). By looking at the mediational strategies employed by a teacher educator as she engages in dialogical interactions with a novice teacher, light might be shed on teacher education programs, in-service programs and teacher training programs, concerning the impact of different mediational strategies on teacher development. Moreover, considering that this study is of a longitudinal nature, having looked at the teacher's practice over a period of four months, it is expected that some cognitive change may have been generated by the mediational process.

Although I am aware that such in-depth individual mediation might be impractical in academic teaching courses, where the bulk of learning how to teach takes place, I believe that this study will show us a path to follow, as it may shed light into what mediation might look like in order to promote favorable results, and the strategies that generated these results may be replicated to students individually or to groups of students, provided that the case study is similar to the contexts where the findings are meant to be implemented (DENSCOMBE, 1998) Moreover, as Johnson (2015) puts it: "teacher education, whether pre-service or inservice, may be the only occasion when the learning of teaching is the result of systematic, intentional, well-organized instruction" (p.517)

#### 1.4 OBJECTIVE OF THE STUDY AND RESEARCH QUESTIONS

Based on the discussion previously presented, the purpose of this study is to analyze the mediation configuration used by a teacher educator in accordance to the development of the teacher so as to draw a relationship between these two aspects (mediation configuration and teacher development), given that some concepts were more easily understood than others. By mediational strategies I mean what the TE did and how she and the teacher discussed the

pedagogical topics dealt with in the mediation sessions. To be more specific, strategies such as asking for clarification, explaining pedagogical points, showing the teacher's guide, eliciting from the teacher, and so on, which can be classified as more explicit, indirect explicit and intentional implicit mediation. Alongside, there will also be an analysis of the frequency of the strategies employed, in order to verify the impact of the systematicity of the strategies used.

Having said that, the research question (RQ) motivating this study is:

To what extent does the mediation configuration provided by teacher educator impact teacher development?

In order to answer this general question, three specific questions are asked:

- RQ 1: Which pedagogical aspects have been approached along the eight mediating sessions?
- RQ2- What mediating strategies are used by the TE to mediate the teacher along the eight mediating sessions?
- RQ3- Can we draw a relationship between the pedagogical aspects developed by the teacher and the strategies used by the TE, along with the frequency in which they occurred? If so, what does this relationship look like?

#### 1.5 ORGANIZATION OF THE THESIS

This study will be divided into 5 chapters, namely: Introduction; Review of Literature; Method; Analysis and Final Remarks.

In Chapter 1 – Introduction, the research problem is defined by providing a brief overview of the teacher education area, highlighting the aspects that grounded this study, namely VSCT, Strategic and Responsive Mediation. The context of this investigation is presented with its significance and objective, along with the research questions that guide the study.

In Chapter 2 – Review of Literature, I present an overview of Vygotsky's Sociocultural Theory, discussing central tenets in the theory, namely mediation, internalization, concept development and zone of proximal development; aligned with that perspective, I bring notions of Dynamic Assessment. I also describe important aspects concerning teacher cognition and teacher development.

In Chapter 3 – Method, the methodology employed in the study is described with the nature and objectives of the study, the research context of investigation (subdivided into setting and participants), the procedures for data collection and data analysis.

In Chapter 4 – Analysis, the findings of study are presented showing the transcriptions of the interactions followed by the analysis and discussion of data  $vis-\hat{a}-vis$  the theoretical framework brought to bear in the study.

In Chapter 5 – Final Remarks, the main points raised in the analysis are summarized, bringing the discussion to the realm of teacher education, answering the research questions that conducted this research. Also, the pedagogical implications of the study are laid out, as well as its limitations and suggestions for further research.

Having explained how this dissertation is organized, I move on to the next chapter, presenting some relevant literature that will be employed to support the analysis and argumentation in this study.

#### 2 REVIEW OF LITERATURE

This chapter presents the theory and studies informing this study starting with the Sociocultural Theory (VSCT), which is the main foundation of this study, along with its most pertinent tenets, namely Mediation, Internalization, Concept Development and Zone of Proximal Development (ZPD). Aligned with ZPD, I look at Dynamic Assessment (FEUERSTEIN; RAND; HOFFMAN, 1979; GOLOMBEK, 2011; LANTOLF; POEHNER, 2011; LURIA, 1961; POEHNER, 2008, among others), and in relation to mediation the notion of Strategic Mediation (WERTSCH, 1985) and Responsive Mediation (JOHNSON & GOLOMBEK, 2016) are brought to bear in the study, with similar perspectives. The literature concerning teacher cognition is also reviewed, following ideas developed by Bailey (2006), Borg (2003, 2015), Johnson (1994, 1999, 2006, 2009, 2015), Lortie (1975), Richards (1991, 2009), among others.

#### 2.1 SOCIOCULTURAL THEORY: A THEORY OF THE MIND

This dissertation mainly follows the principles postulated by the Russian psychologist and educator Lev Semenovich Vygotsky and his Sociocultural Theory (VSCT), followed and expanded by with his pupils Alexei Nikolaievich Leont'ev and Alexander Romanovich Luria, and in the appropriation of his followers in the second language and teacher education arena, like James P. Lantolf, Steven S. Thorne, Peter Smagovinsky, Yuriy Karpov and Karen Johnson, to name a few.

Vygotsky was a Russian psychologist and educator, who, in the beginning of the twentieth century, developed what came to be known as the Sociocultural theory of development. Sociocultural theory (VSCT) is a *theory of mind* (LANTOLF; THORNE, 2006), which posits that individuals build their subjectivity within their interpersonal relations, *vis-à-vis* the social, historical and cultural context they are inserted in (WERTSCH, 1985, p. 58). Despite having died at a very early age, Vygotsky's contributions to psychology and education were paramount, and his followers continued to develop his ideas, especially in the Vygotsky Circle, which was a network of psychologists and thinkers who worked on Vygotsky's ideas about learning and development. Although he died in 1934, his ideas were only disseminated in the western world in the early 80's, with the publication of his book

"Mind in Society", which gained special attention due to its opposition to the learning theories existing then so far, namely Innatism, Behaviorism and Cognitivism.

Opposing Vygotsky's view, Rego (1995) states that Innatism postulates that human cognitive development is innate, that is, humans possess potential capacities, ready in the moment of birth, that will mature and develop, attributing human development to hereditary. Conversely, differently from VSCT, Behaviorism explains learning as a system of behavioral responses to physical stimuli. As Fosnot and Perry (2005) claim, "Psychologists working within this theory of learning are interested in the effect of reinforcement, practice, and external motivation on a network of associations and learned behavior" (p. 8). Thus, behaviorism posits that learning and development are caused by the stimuli provided by the environment. In that view, as Rego (1995) puts it, learners are considered empty vessels, and teachers are responsible for filling them, modeling them to be able to engage in social activities. Vygotsky also refuted Cognitivism, which, as Ertmer and Newby (1993) argue, presupposes that learning is not merely dependent on mechanical environment stimuli, but a process that takes into account what the learner already knows (pre-existing knowledge) and what s/he does to acquire new knowledge, that is, the way learners integrate new information into their existing schemas. According to Karpov (2014), "the main point of cognitive instruction is that scientific knowledge should not be taught to students directly; rather, knowledge should be discovered by students themselves in the course of carrying out some kind of research activity" (p. 168). It is especially this last point that differentiates cognitivism to VSCT: in the latter, learners do need the help of a more experienced other in order to make sense of new information, especially as far as scientific knowledge is concerned. In this vein, contrary to cognitivism, Vygotsky postulates that learning precedes development, which, given that individuals dwell in a culturally defined environment, occurs from "outside in" and not from "inside out", as cognitivism avers.

According to Vygotsky, thought and language are intertwined, which means that there is no mature thought without language (only rudimentary thought, like practical intelligence), or *naming* (knowledge of words): "real concepts are impossible without words, and thinking in concepts does not exist beyond verbal thinking. That is why the central moment in concept formation, and its generative cause, is a specific use of words as functional 'tools'." (VYGOTSKY, 1962, p. 107) . What the author means to say is that

concepts are formulated in our minds through the word, and detached from it, it is impossible to develop them. The origins of thought and speech were one of Vygotsky's pursuits, motivating him to carry out a variety of experiments in order to elaborate on this issue. According to Vygotsky (1962, 2000), although thought and speech have diverse genetic roots, they converge, that is, speech and thought are intertwined, as mental processes need language to be developed and carried out.

In order to investigate this interrelation, Vygotsky proposed to study the genesis of development, within four domains, namely phylogenesis (the development of a certain species), ontogenesis (the development of an individual in that species), sociogenesis (the social development of that individual during ontogenesis) and microgenesis (the development of specific processes during ontogenesis). To analyze these domains, Vygotsky, based on work by his contemporaries, experimented with chimps, concluding that their language does not function as linguistic signs, but feelings and actions. In terms of intellectual development, chimps do not seem to have developed an ideational behavior, that is, they cannot mentally represent reality: they only perform tasks related to what they can see in their field of vision. Children's and chimps' intellectual development go side by side during a child's pre-speech phase, but at around two years old, in a child's development continuum, speech gains a new status: it becomes an intellectual act, while chimps never achieve this state. Even though, ontogenetically speaking, speech and thought have different genetic roots, these lines converge when thought becomes verbal and speech becomes intellectual. The development of speech and thought depends on the social experience of the child: the more stimulated a child is, and the more contact with social experiences, the better the development; therefore, verbal thought is a historically and socially dependent process.

As a matter of fact, Vygotsky's main ideas revolve around the fact that humans learn and develop within interpersonal connections, hence his famous saying "Through others, we become ourselves" (1931/1997). His writings primarily focused on children, especially on how children learn to speak their first language; notwithstanding, according to Rego (1995), Vygotsky was not essentially interested in elaborating a theory to explain children development: instead, he resorted to childhood as a way of generalizing about human development, since children are "at the core of pre-historical cultural development", as far as language is concerned.

Vygotsky (1962) proposed the two basic roles of language: one is for social exchanges, that is, to interact with others (provided that it possesses a generalizing thought, in

the sense that, by categorizing concepts, language can be recognized by the interlocutors). This process is unified by meaning, which mediates the symbolic union between the individual and the world, which is the other role of language. Meaning, on the other hand, is historically derived, as language evolves, and it also evolves in a person's development. In this sense, meaning can be differentiated as *meaning* itself, shared by speakers of a certain language, and *sense*, an individual meaning that words acquire.

The author emphasizes the importance of work in human communication and articulation of thought and speech, explaining that when the development of thought and language converge there is the emergence of verbal thought and rational speech. External and internal (inner) speech serve different purposes: the former is for communication (outward bound) and the latter is for helping a person in their psychological operations (inward bound). Therefore, the role of speech changes: in external speech, it is to express oneself and be understood; in internal speech, it is for making sense of the world.

Lantolf and Thorne (2006) affirm that humans are endowed with psychological tools that give us the capacity to control our thinking processes, or *higher mental functions*. These functions are distinguished from elementary mental functions for their voluntary characteristic: the latter are biological, whereas the former, historical-socially constituted, that is, mediated by the cultural context a person is inserted in. In the biological evolution of humans two processes take place: imitation and innovation- it is by imitating what we see others do, and also by using higher mental functions, for the purpose of innovating them, that we evolve. Vygotsky's main contribution to the evolution of speech theories is that, despite the fact that prehistoric men also had the biological tools to develop higher mental functions, it was with the evolution of culture and socialization that these functions developed; in this sense, schooling plays a central role in developing abstract thinking in linguistic problem-solving examples.

Having overviewed the general framework concerning the sociocultural theory, I then move on to present the pivotal concepts that underlie this study.

# 2.1.1 Mediation, Internalization, Concept formation and ZPD and their relation to teacher education

Vygotsky's notions of mediation, internalization, concept development, and ZPD are key tenets in explaining human learning and development under a sociocultural approach. Numerous studies have used the VSCT in order to explain Second Language Teaching (SLT) in the teacher education field as a whole (AGNOLETTO, 2019; AGNOLETTO; DELLAGNELO, 2018; BIEHL, 2016; BIEHL; DELLAGNELO, 2017; CERUTTI-RIZATTI; DELLAGNELO, 2016; COOK et al, 2002; DALLACOSTA, 2018; DALL'IGNA, 2018; DELLAGNELO, 2007; GOLOMBEK, 2011; JOHNSON; DELLAGNELO, 2013 and 2015; JOHNSON, 2009; JOHNSON; ARSHAVSKAYA, 2011; JOHNSON & GOLOMBEK, 2016; KARPOV, 2003 and 2014; LANTOLF, 2007; POEHNER, 2008; POEHNER; LANTOLF, 2005; RUHMKE-RAMOS, 2018; SMAGORINSKY; COOK; JOHNSON, 2003; SWAIN; KINNEAR; STEINMAN, 2010; SILVA, 2009, among many others). Although each of these tenets has its particularities and foci, they are intertwined when we consider one's learning path. In a nutshell, it is through the process of mediation (being understood as the interposition of an external element in the relation between men and the world), that we start internalizing (understanding and mastering) concepts, a process that depends on our ZPD (or the level of maturity to understand a certain aspect). Nevertheless, due to the importance of each and all these concepts for the purpose of explaining the results of the present study – as the participant teacher's development of the pedagogical concepts and their eventual internalization may have been influenced by the kind of mediation provided by the teacher educator. Following, I will present the tenets individually, in order to go about their peculiarities in more detail.

#### 2.1.1.1 Mediation: the world affecting us

According to Vygotsky (1962, 1980, 1987, 1998, 2000), we learn through our participation in culturally and historically directed activities, but in order to fit in and adapt to the environment and to the society we are inserted in, we need mediational artifacts, that is, tools that interpose our existence with the world. Lantolf and Thorne (2006) define mediation as "the process through which humans deploy culturally constructed artifacts, concepts, and activities to regulate (i.e. gain voluntary control over and transform) the material world or

their own and each other's social and mental activity" (p.79). The authors claim that *cultural* activities, i.e. all sets of activities related to one specific culture, like watching TV, playing soccer, going to school, etc., are mediated by cultural artifacts, or tools that are used in a specific culture, like a fork, TV, a ball, a book, and the like, forming *cultural concepts*, which are concepts developed as one is inserted in a specific culture, such as the idea of entertainment, education, family, the role of men and women, and so on. Artifacts become cultural by their repeated and meaningful use over time; at first, they are merely objects, which gain a cultural concept by being repeatedly employed in a given situation, with an intended purpose. According to Lantolf and Thorne (2006), this might explain how children learn: by being regulated by others (caretakers), who show/ teach children the intended purpose of artifacts, the child organizes the artifacts into conceptual categories, gaining relevance as s/he repeatedly interacts with them. Over time, the child gains agency (selfregulation), or "the capacity to mediate and regulate his or her own activity through culturally organized mediational means". (p. 69) In thinking of a book, for example, the first time the child is introduced to this cultural artifact, s/he does not know what that is for, so s/he tends to tear or crush it. As she interacts with the book – and has caretakers mediate this interaction and thus show its purpose - s/he starts to flip through its pages, pay attention to the pictures in it, and finally to read it.

Although mediational artifacts have an intended historical meaning, they do not restrict themselves to that sole meaning; instead, humans create other meanings and employ artifacts with other purposes: this phenomenon is called ratchet effect or spin-off use (for example, using a spoon and pan to make noise instead of cooking). This is of paramount importance for human development, as "humans do not merely select ready-made tools, including pre-fabricated linguistic forms and meanings, from cultural tool-kit; rather, they shape their artifacts online as needed" (LANTOLF & THORNE, 2006, p. 65). Going back to the example of the book, parents, for example, may use books not only to read, but also to show to their children the importance of reading, thus attaching a new purpose to the book.

Yet, Vygotsky recognizes that not all human relations to the world are mediated. There is also a direct relationship of individuals with the world, what he calls elementary mental functions, which are an inherent part of our phylogenesis. Examples of elementary mental functions are pain, hunger, hearing noises, for instance, which are involuntary

reactions, and require involuntary attention (LANTOLF & THORNE, 2006). On the other hand, the interaction between elementary mental functions and culture enables the development of higher mental functions or signs (VYGOTSKY, 1980), which require voluntary control, for example, memory, attention, rational thinking, learning, and most importantly, language. As Lantolf and Thorne (2006) explain, "The interweaving of our cultural and our biological inheritances gives rise to higher mental functions" (59). In other words, the appropriation of mankind's cultural artifacts is carried out through higher mental functions. In this vein, Vygotsky states that

the invention and use of signs as auxiliary means to solve a given psychological problem (to remember, compare something, report, choose, and so on) is analogous to the invention and use of tools in one psychological respect. The sign acts like an instrument of psychological activity in a manner analogous to the role of a tool in labor. (VYGOTSKY, 1980, p. 52)

That rationale explains human development, as we appropriate the knowledge generated within a certain culture or cultures and use it to transform the environment we live in as well as to transform ourselves. According to Vygotsky "human development is a product of a broader system than just the system of a person's individual functions, specifically, systems of social connections and relations, of collective forms of behavior and social cooperation" (LANTOLF; THORNE, 2006, p. 59). The fact that we are able to use language (a mediational artifact) to pass on the knowledge we have learned is what differentiates us from other species. Language in VSCT is the main and most important mediational artifact, as it serves communicative purposes, cognitive development, and meaning-making processes (LANTOLF; THORNE, 2006, p. 5); hence, human mental activity is organized within a culturally established environment, in which language plays a fundamental role.

Therefore, as Lantolf and Thorne (2006) put it, "human consciousness is mediated through culturally constructed and organized means" (p.60), and the construction of this knowledge is mediated by language. Language, thus, has a dual function: it is outwardly bound, that is, aiming at communication, and inwardly bound, or directed at the (re)organization of our cognitive development. In this vein, fundamental in Vygotsky's theory is the notion of speech, which can be social, egocentric or inner. Social speech aims at regulating our participation is society, whereas inner speech aims at systematizing our internal plane. The process from social to inner goes through another phase, that is egocentric speech, which appears to be social (it is verbalized), although its intended meaning is inner (to organize one's cognition). An example of egocentric speech is when one utters the way in

which to conduct a certain activity, like repeating instructions to oneself. Vygotsky poses that "egocentric speech represents the ontogenetic phase in which children develop the ability to use social speech as means for regulating their own mental functioning" (LANTOLF & THORNE, 2006, p. 73), thus transitioning from external to internal speech.

As far as the means by which mediation occurs, there are three types of mediation: object-regulated, other-regulated and self-regulated mediation: object-regulated mediation takes place when an object, as for example, a teacher's manual, intervenes between teachers and their object of knowledge; other-regulated mediation happens when a more experienced other (a teacher, or peer) intermediates a person and the knowledge to be learned; and self-regulation (or agency) is when one is able to perform a task without the interpolation of any other means, when one's internal plane is organized. As Karpov and Haywood (1998, cited in LANTOLF, 2006) claim,

Vygotsky distinguished this duality: two types of mediation: meta-cognition, or self-regulation, and cognition, or mediation organized according to cultural concepts. Self-regulation is inwardly directed private or inner speech that is derived from social speech. The difference between social and self-regulatory speech resides in the nature of the interlocutors. In the former, interaction occurs between 'I' and 'You', while in the latter it takes place between 'I', who decides what to attend to and talk about, and 'Me' who interprets, critiques and evaluates 'I's' decisions (VOCATE 1994: 12). We thus achieve self-regulation as a consequence of regulating others and of being ourselves regulated by others. (LANTOLF, 2006, p. 39)

The quality of other-mediation as a cultural activity may present the duality of explicitness or implicitness, as Wertsch (2007) claims

Explicit mediation involves the intentional introduction of signs into an ongoing flow of activity. In this case, the signs tend to be designed and introduced by an external agent, such as a tutor, who can help reorganize the activity in some way. In contrast, implicit mediation typically involves signs in the form of natural language that have evolved in the service of communication, and are then harnessed in other forms of activity. (WERTSCH, 2007, p. 185)

The authors predicate that explicit mediation involves an intended and clear-cut presentation of a mediational artifact (physical or symbolic), which intends to trigger one's response to a learning activity. Notwithstanding, when implicit mediation takes place, the more knowledgeable other does not aim at provoking any response, however it happens, unintentionally.

However, as pointed out in Biehl (2016)

It looks, though, that Wertsch leaves a third kind of mediation behind, one that is rather common in educational contexts: that in which there is intentionality but not explicitness. In this later case, the mediator guides the "mediatee", who is then expected to make meanings by themselves. (BIEHL, 2016, p. 28)

This kind of other-mediation, from now on called *intentional implicit mediation*, is one that permeates teacher education, especially at in-service programs, aiming at scaffolding teachers to gradually develop pedagogical concepts, enabling them to self-regulate. According to Wertsch (2007):

From a Vygotskian perspective, the process of mastering a semiotic tool typically begins on the social plane, though it of course has individual psychological moments and outcomes as well. In his 'general genetic law of cultural development', Vygotsky made this point by arguing that higher mental functions appear first on the 'intermental' and then on the 'intramental' plane. When encountering a new cultural tool, this means that the first stages of acquaintance typically involve social interaction and negotiation between experts and novices or among novices. Is is precisely by means of participating in this social interaction that interpretations are first proposed and worked out, and therefore, become available to be taken over by individuals. (WERTSCH, 2007, p. 187).

The author points out that the mediation might be *explicit or implicit* (WERTSCH, 2007), or *strategic* (JOHNSON; DELLAGNELO, 2013; JOHNSON; GOLOMBEK, 2016), moving from implicit to explicit- though graduated to the learner's needs, so it does not cause frustration (due to being too challenging) or lack of interest for being too easy); strategic mediation should also cater to the learner's urgent needs, prompting cognitive transformation instead of behavioral performance. Therefore, the initial goal of strategic mediation should not be to transmit the expert other's knowledge, but to enable a starting point for the learner to start handling the task, leading to a desired internalization of the concepts presented by the expert (VERITY, 2005). It is important to point out that during this process there usually is the emergence of *intersubjectivity*, or "when interlocutors share some aspect of their situation definition" (WERTSCH, 1985, p. 159).

At a first moment, mediator and *mediatee* may not share the same perspectives over a goal-directed activity, which is accommodated as they engage in negotiation of meanings, creating a "temporarily shared social world" (WERTSCH, 1985, p. 161). It is commonly observed in teacher education that the *mediatee* at a first moment tends to replicate the mediator's speech and practices, however not fully grasping the intention of their doings, which is referred to by Cazden (1981) as "performance before competence", (cited in WERTSCH, 2007, p. 186). As their level of intersubjectivity increases, and the situation definition over a certain aspect becomes increasingly redefined towards a shared understanding between mediator and *mediatee*, the latter eventually reaches a perception of a

task situation (WERTSCH, 1985; 2007) which is in sync with the more experienced other (CERUTTI-RIZATTI & DELLAGNELO, 2016).

Similarly to strategic mediation, Johnson and Golombek (2016) argue for a type of other-mediation (engaging teacher and teacher educator) in which emphasis on systematicity, goal-directedeness and intentionality is put, making room for the emergence of a teacher whose actions are grounded on sound scientific knowledge, yet aligned with the practice of teaching. This type of mediation, named by the authors as *responsive mediation* aims at moving the teacher through a better understanding of what teaching means, its nuances and possibilities, by being "emergent, dynamic, and contingent on the interactions between teachers and teacher educators" (JONSON; GOLOMBEK, 2016, p. 31) In this sense, responsive mediation is co-regulated (FOGEL, 1991), as both the teacher educator and the teacher are involved in the development of pedagogical concepts, the former realizing what the latter needs to improve, while the latter (intentional or unintentionally) shaping the syllabus of what is being presented to them.

Thus, it is of paramount importance that the teacher educator be attuned to the teacher's needs, potential and accomplishments in the learning path. Nevertheless, as Johnson and Golombek (2016) posit, this process is not direct, recipe-like; instead, "emotions, differing motives, and teacher constructed and/or imagined identities will shape these interactions and how teachers respond to the mediation they experience." (JOHNSON; GOLOMBEK, 2016, p. 34). This aspect was pointed out throughout Vygotsky's work, when he refers to *perezhivanie*, or the personal emotional significance one goes through along their lifetime, which impacts on the development of their personality, "especially the emotional and visceral impact of lived experiences on the prism through which all future experiences are refracted". (JOHNSON; GOLOMBEK, 2016, p. 42).

Responsive mediation needs to take into account one's perezhivanie, with the teacher educator trying to make the atmosphere amenable and productive, plus aiming at *growth points* (MCNEILL'S, 2000, 2005), or moments when a teacher's cognition and emotions are in a disharmony, externalized by the teacher's gestures, facial expressions and *languaging*, which should be tackled by the teacher educator's responsive mediation in order to balance this discord, "creat[ing] the potential for the development of L2 teacher/teaching expertise." (JOHNSON; GOLOMBEK, 2016, p. 39).

In a nutshell, for responsive mediation to happen teacher educators need to have "clearly articulated professional development goals, provide exposure to theoretically and pedagogically sound instructional practices (sign forms and/or sign systems), and make the reasoning behind those practices explicit (sign meanings)" (JOHNSON; GOLOMBEK, 2016, p. 42). Teacher educator's responsive mediation is about being mindful of the teacher's perezhivanie and emotional stances, emergent capabilities and growth points, leading to their professional development.

As claimed by Biehl (2016) the mediation provided by an expert other intends to provoke awareness and learning in a teacher, so as to promote the desired internalization. This is not a simple task, though, and research has pointed out to the importance of the process of externalization, as a dialectical force to internalization. According to Johnson and Golombek (2011), "as teachers make their understandings explicit to themselves and others, their thinking is laid open to social influence. Their spoken or written words can be used to begin to self-regulate their behaviors and control their own worlds, constituting an initial step in cognitive development" (p. 491). Still according to the authors, externalization is not thinking, but a way to regulate one's thinking process, that is, a tool used for confirming one's assumptions over a given topic. (p. 492). This process is usually put forward in feedback sessions, conversations with peers, or even in informal moments of overt self-reflection.

Intertwined with mediation, it is paramount that we understand Vygotsky's concept of internalization, which will be reviewed in the next sub section.

#### 2.1.1.2 Internalization: from the world to us

As stated in the last subsection, mediation is intertwined with internalization, as it is through mediation that one internalizes concepts. Internalization can be defined as "the process through which a person moves from carrying out concrete actions in conjunction with the assistance of material artifacts and of other individuals to carrying out actions mentally without any apparent external assistance" (LANTOLF, 2000, p. 14). This means to say that subjectivity, or self-regulation, is built from a person's constant participation in culturally oriented practices, and by being mediated when using higher mental functions (especially language) in order to develop cognitively (LANTOLF & THORNE, 2006, p. 1).

Cognitive development, or the internalization of sign meanings, involves both social (external) and psychological (internal) planes, where, from our interaction with the world we

live in and the people we get in touch with (interpsychological plane), we are exposed to knowledge that may be assimilated and, when it makes sense, organized into our internal sphere (intrapsychological plane). As Vygotsky put it "It is necessary that everything internal in higher forms was external, that is, for others it was what it now is for oneself. Any higher mental function necessarily goes through an external stage in its development because it is initially a social function." (VYGOTSKY, 1981, cited in WETSCH 1985, p. 62). Importantly, as pointed out by Lantolf and Thorne (2006), this process does not mean that the "external activity is plunged into some depths of the internal plane", (...) but, it is through internalization that the internal plane itself is reorganized" (p.154). Thus, our mental world is constantly (re)organized when in interaction with others, with both internalization and externalization happening at the same time, the latter serving as a catalyst to future mental plane reorganization, and also impacting the social environment an individual dwells in, as a "transformative and reciprocal process whereby a person transforms what is internalized and through externalization potentially impacts the self and the community" (ROBBINS, 2003, p. 32). Actually, Vygotsky pointed out that internalization does not mean that "the internal plane is a mere duplicate of the external plane" (LANTOLF; THORNE, 2006, p.155), but that the "bi-directional process of internalization and externalization, mediated through semiotic artifacts, both idealizes the object and objectifies the ideal" (LANTOLF; THORNE, 2006, p. 155). Actually, when we externalize thoughts, we gain awareness of our "beliefs, perceptions and understandings" (AGNOLETTO; DELLAGNELO, 2018, p. 20)

As a matter of fact, Vygotsky acknowledges that the impact of social influence in human development is such as to claim that there is no solo performance, that is, in every action we take there are traces of our previous interactions with the world. Lantolf and Thorne (2006) explain that point when they say that although the point to internalization is that one increasingly acquires independence from specific concrete situations, they still keep on depending on the mediational means when in solo performances, due to the fact that "psychological tools are genetically derived from socioculturally organized concepts, artifacts, and activities" (p. 159).

Wertsch (1985) summarizes the four main points of Vygotsky's ideas on internalization as follows:

Internalization is not a process of copying external reality on a preexisting internal plane; rather, it is a process wherein an internal plane of consciousness is formed.

(2) The external reality at issue is a social interactional one. (3) The specific mechanism at issue is the mastery of external sign forms. And (4) the internal plane of consciousness takes on a "quasi-social" nature because of its origins. (WERTSCH, pp. 66-67)

Socioculturally, the mechanisms to internalization include mimicry, emulation, and imitation, being the latter the real propeller to internalization, as a "uniquely human capacity that is implicated phylogenetically and neuropsychologically in language acquisition" (LANTOLF; THORNE, 2006, p. 176). When an individual simply parrots or mirrors actions or sounds, they are performing mimicry; when they understand the goal, but do not discern the relevance or the purpose of the means to achieve it, they go through emulation; finally, when individuals understand the goal and the means to achieve that goal, they display imitation.

Vygotsky put special emphasis on the importance of school teaching/learning (obuchenie) to internalization, as it provides opportunities for learners to "interrelate academic and everyday concepts in goal-directed, practical activity that has relevance in the material world" (JOHNSON; GOLOMBEK, 2016, p. 40). According to the authors, relating theory (academic concepts) and practice (everyday concepts) in teacher education grants teachers the chance to apply what they study, making theory more achievable and feasible. As Johnson (2015) claims, "the dialogic interactions that unfold in the practices of teacher education represent the external forms of social interaction that teacher educators hope will become internalized psychological tools for teacher thinking" (p. 516). With time and systematic goal-directed mediation, provided by the teacher educator, teacher thinking processes evolve, as the pedagogical concepts, which at first are just forms, and with exposure, interaction and meaningful use, evolve to sign meanings, becoming more and more internalized. As stated by DallaCosta (2018), "the process of internalization might be perceived or traced through teachers' transformative imitation of the instructional practice formally instructed by the teacher educator along the pre-service program" (p. 14). I would expand this notion to encompass in-service programs, once teachers' understanding and internalization of pedagogical concepts might go through significant progress, which begins at pre-service and continues at in-service, with the theory gradually making more sense to teachers, as they engage in reflective activities. As Johnson and Golombek (2016) assert

The assumption, of course, is that the introduction of these new sign forms, through course readings, in-class discussions, and reflective activities will enable teachers to work out the sign meanings and functional significance and eventually lead to changes not only in how teachers think about teaching but also in what they actually do in the classroom. (JOHNSON; GOLOMBEK, 2016, p. 41)

Nevertheless, the internalization path does not happen at an automatic, linear and straightforward manner; rather, it develops in a *twisting* way (SMAGORINSKY; COOK; JOHNSON, 2003), which happens as one engages in activities related to their object of knowledge. Relating that to teacher education, it is not rare to find examples of novice teachers who show a certain degree of development in a given pedagogical aspect, to later display a lack of mastering in that same aspect, which means that that specific concept is not yet internalized, but in the process of internalization. Thus, the importance of

prolonged and sustained participation in concrete goal-directed activity (e.g., actual teaching), supported by responsive mediation offered by an expert (e.g., teacher educator, mentor teacher, and/or peer teacher) that leads the development of sign meaning (e.g., theoretical and pedagogical tools or signs) so that sign meanings become more like those of experts, with the ultimate goal of enabling teachers to use sign meanings and sign systems flexibly and fluently in the activities of L2 instruction. (JOHNSON; GOLOMBEK, 2016, p. 42)

In a nutshell, internalization is the process through which concepts are learned and developed leading to concept development, the topic of the next subsection.

# 2.1.1.3 Concept Development: how we understand the world around us

Vygotsky postulated that the basis of development lies on conceptual learning, which emerges as an individual takes part in meaningful socially-bound activities, shaping and restructuring the understanding of the world they live in. In this process, language plays a pivotal role, for 'the concept is not possible without the word' (VYGOTSKY, 1987, p. 131), hence analyzing the formation of a concept is intertwined with the analysis of the development of word meaning. The famous Vygotsky's maxim 'sign meaning develops' refers to the fact that signs (being understood as psychological tools, like language) are commonly employed prior to their full understanding at a functional or meaningful level (BROOKS *et al.*, 2010), a process which gradually becomes more comprehensible as an individual engages in learning experiences.

Vygotsky claims that concepts develop in two manners: on the one hand, there are everyday concepts, that develop in an empirical, situational and practical way (SWAIN; KINNEAR; STEINMAN, 2010), thus intuitively; on the other hand, there are scientific (or

academic) concepts, which generate systematic relationships and definitions, thus, consciously. Everyday concepts can be subdivided in spontaneous and non-spontaneous concepts, the former referring to concepts learned in practical activities, which demand longer periods of practical experience to develop. As Lantolf (2007) put, spontaneous concepts are, "at the heart of our lived experience as human beings and are, for the most part, more than adequate for carrying out our daily activities." (p. 39). Nevertheless, as spontaneous concepts develop along a person's participation in social activities, they are usually employed without an understanding of goal and cause-effect relationships, so "when someone tries to bring this type of knowledge into consciousness the result is usually a vague, incoherent, incomplete, and even inaccurate statement of the concept" (JOHNSON, 2009, p. 20). Non-spontaneous concepts, in contrast, also come up from daily life, but are "intentionally taught and consciously acquired and include such activities as baking cakes, driving cars [...]" (LANTOLF, 2007, p. 40). The author goes on explaining that for a person to bake a cake they do not need to understand chemistry, but follow procedures; thus, non-spontaneous concepts may be seen as the result of proceduralized instructions, as "the individual follows a set of behaviors on what to do under certain circumstances, grounded in directly observable empirical experience" (LANTOLF, 2007, p. 40). In a nutshell, everyday concepts are developed along a person's experiences in practical activities, usually presenting unsystematic meanings, being situated to the tasks at hand, and frequently not being generalized to situations other than those in which they have developed.

On the other hand, scientific knowledge emerges from theoretical learning, developed specially at an academic level, or, using the Russian term Vygotsky employed in his writings, "obuchenie", meaning school learning-teaching. Even though they are based on human experience, scientific concepts can be generalized, independently from physical constraints, being understood at an intellectual level of abstraction. As a consequence, they portray a "deeper understanding of, and control over, the object of study" (LANTOLF, 2007, p. 46), which makes it possible for individuals to use them in situations different from the ones they were originally intended, systematically evolving through instruction. They "represent the generalizations of the experience of humankind that is fixed in science, understood in the broadest sense of the term to include both natural and social science as well as the humanities". (KARPOV, 2003, p. 66)

Vygotsky (1935/1994) claimed that, differently from spontaneous concepts, which come up through experiences in the everyday world, academic concepts in children go

through a crucial developmental process, as he explains: "when a child assimilates a concept, he reworks it and in the course of this reworking, he imprints it with certain specific features of his own thoughts" (p. 361), which explains how new knowledge anchors in previously learned one to form deeper, more systematic and complex meanings, restructuring a person's everyday concepts.

This also explains the interdependence of everyday and scientific knowledge: although their developmental processes are different, they are "tightly bound up with one another and constantly influence one another" (p. 365). At school, the child, through the mediation of teachers, books and other pedagogical resources, and by engaging in goal-directed, practical and relevant activities, starts building bridges between what they had experienced up to that moment at a practical level (everyday) and the new systematized knowledge. This process, thus, is not conflicting, but rather complimentary: everyday and scientific concepts interact with each other, allowing the individual to "move ahead into new zones" (RUHMKE-RAMOS, 2018, p. 22). Vygotsky claimed that each of these types of concepts alone were useless and pointless. He even criticized formal schooling, claiming that teaching concepts straightforwardly "is impossible and fruitless. A teacher who tries to do this usually accomplishes nothing but *empty verbalism*, a parrot like repetition of words by the child, simulating a knowledge of the corresponding concepts but actually covering up a vacuum" (VYGOTSKY, 1986 p. 150).

Vygotsky (1962) expands this notion by saying that everyday and scientific concepts develop in opposite but complementary directions, the former having a bottom-up movement, rising from more elementary and simpler (thus lower) characteristics to higher ones, whereas the latter develop in a top-down movement, from more complex characteristics (related to higher forms of thinking) to a more concrete level (p. 219), until they merge into what Vygotsky called "true concepts", illustrated in Picture 1 below (RUHMKE-RAMOS, 2018, p. 21)

Picture 1: Bottom-up and Top-down movements in concept development.

# 

**Concept Development** 

Prezi<sup>The</sup> structure foundation: earlier development, simpler, more elementary characteristics

Source: RUHMKE-RAMOS, 2018, p. 21.

As Smagorisky *et al.* (2003) put it "while spontaneous concepts may be developed without formal instruction, scientific concepts require interplay with spontaneous concepts; hence the problematic nature of the theory/practice dichotomy" (p. 1). Relating this notion to teacher education, it is safe to say that along a teacher's practice the scientific concepts learned in academic settings are further developed as they are faced with practical activities of teaching, forming the necessary dialectic relation necessary to attain true concepts.

In order to achieve a true concept, Vygotsky (1987) posits that an individual goes through several developmental stages. Vygotsky claims that there are generalizations, which he calls *complexes*, that may happen on the way of concept development, presenting similarities to the true concept, but missing to achieve its theoretical unity. As the author puts it, complexes present "heterogeneous empirical connections that frequently have nothing in common with one another" (p. 137), and whose bonds are "concrete, factual, and discovered through direct experience" (VYGOSTKY, 1962, pp. 65-66). The author states there are five types of complexes (associative, collection, chain, diffuse, and pseudo-concept) (VYGOSTKY, 1962, pp. 62-66), emphasizing that their final stage *-pseudoconceps* - is due to the fact that they bridge complexes to true concepts: "The pseudo-concept serves as the

connecting link between thinking in *complexes* and thinking in *concepts*" [my emphasis] (VYGOTSKY, 1962, pp.68-69). The author states that a pseudoconcept is a "shadow of the concept, one that reproduces its contours" (VYGOTSKY, 1987, p. 144). According to Smagorinsky et al. (2003), there are "complexes, in which some members of the set may be unified with others but all are not unified according to the same principle; and pseudoconcepts, in which members of the set appear unified but include internal inconsistencies." (SMAGORINSKY et al., 2003, p. 1). However, these stages are not clearcut, neither happen in a straightforward manner; instead, they may overlap. According to Vygotsky (1987), while a new stage emerges through a person's generalization of the pregeneralized system of objects in the former stage, thus building on previous generalizations, ideas are challenged and progress is often accompanied by setbacks. It is important to point out that the transformation of complexes into pseudoconcepts and then concepts happens as scientific and everyday concepts interact in concrete, situated, meaningful and pertinent events, building upon the knowledge an individual already possesses and will form concepts that are at the same time convergent with the generalizations, principles and unity of a true concept and imprinted with their understanding.

Bridging these notions to teacher education, a teacher's path in the development of pedagogical concepts may depend on the quality of the theoretical knowledge they are exposed to, and how much this theory resonates in the teacher's empirical knowledge, that is, to what extent they are able to make sense of what they perceive. The development of pedagogical concepts optimally follows a teacher along their career, yet not as a formula to be learned, but as a process of engagement and understanding. Critics to teacher education posit that there is an excess of theoretical knowledge that is presented but not transported to practical knowledge, remaining at an abstract level, or empty verbalism, and thus does not turn into concepts, as the scientific knowledge is not confronted to its everyday counterpart. As explained by Cook *et al.* (2002) "in teacher education, the problem is not too much theory, but too little concept." (Cook, *et al.*, 2002, p. 412)

Actually, when a teacher starts *thinking in concepts* (KARPOV, 2003), it means that they can apply what they have learned, reasoning about it and using pedagogical skills and knowledge effectively and appropriately in diverse teaching settings, being able to discern the

different goals and reasons for conducting their practices (JOHNSON; GOLOMBEK, 2016, p. 5)

For a teacher to start developing and internalizing *true concepts*, it is important that they begin, often dialectically mediated by a more knowledgeable other, to question their implicit knowledge and beliefs about teachers, teaching, and student learning arising from their "apprenticeship of observation" (LORTIE, 1975), articulating theoretically sound reasons for employing different pedagogical tools and techniques. It is also key for the teacher educator to perceive when teachers start using *true concepts* "as tools for thinking, enabling them to see themselves, classroom life and the activities of teaching/learning through new theoretical lenses" (JOHNSON; GOLOMBEK, 2016, p. 173). Similarly, in the process of mediating teachers, teacher educators are also expected to "identify what they do in their pedagogy and why, engage in a similar process of thinking through concepts more intentionally and responsively — with the goal of cultivating teacher development" (JOHNSON; GOLOMBEK, 2016, p. 174)

It is the goal of this study to analyze how the kind of mediation used by the teacher educator influenced the teacher's process of coming to understand (or starting to internalize) the pedagogical concepts mentioned in the mediating sessions. Hopefully, as the teacher starts linking the 'expert' knowledge provided by the teacher educator, to her 'experiential' knowledge in the shoes of a student or teacher, this connection will enable her to reexamine the way she describes and interprets her practice, reorganizing her experiential knowledge and creating new lens through which she understands teaching. As Johnson and Golombek (2016) claim "expertise' has a great deal of experiential knowledge in it, but it is organized around and transformed through 'expert' knowledge" (p. 6).

However, a person's understanding of concepts greatly depends on the extent to which one is able to grasp what they are exposed to in the learning process. This level of attunement is what Vygotsky called Zone of Proximal Development, the topic of the next subsection.

## 2.1.1.4 Zone of Proximal Development: our potential world

Unlike traditional schooling, where "appropriate" instruction happens after a child achieves a certain development level, Vygotsky (1986) believed that optimal instruction "marches ahead of development and leads it," focusing on "ripening" mental processes (p.

188). According to him, learning creates new developmental zones, awakening a range of internal developmental processes that come up only when the child is interacting with others in their environment and cooperating with peers. This prospective metaphoric space is what the author called Zone of Proximal Development (ZPD), "the distance between the actual developmental level as determined by independent problem solving and the level of potential development as determined through problem solving under adult guidance, or in collaboration with more capable peers" (VYGOTSKY, 1980, p.86). The author elaborated this notion in reaction to the way the assessment of children's intellectual skills and the evaluation of instructional practices were being held in URSS at the time, focusing too much on intrapsychological (within oneself) accomplishments and failing to strive to predict future growth, as well as not considering the importance of the interpsychological (among people) learning and the procedural aspect of the ZPD in instruction, emerging in the process of performing with assistance (WERTSCH, 1985; JOHNSON; GOLOMBEK, 2016). Vygotsky, using a flower metaphor, claimed that the ZPD relates to the unmatured functions, those "that will mature tomorrow but are currently in an embryonic state. These functions could be termed the 'buds' or 'flowers' of development rather than the 'fruits' of development" (1980, p. 86). Magalhães (2009) considers the ZPD as a transformative activity, where practice and dialectical collaboration aligned with a critical view of the world make room for the creation of new developmental "trails". Being an individual characteristic, it sheds light on the diverse learning rhythms every person goes through in developing concepts, and it is crucial to access their actual level of knowledge so as to understand their potential level. In order to illustrate this, Vygotsky referred to measuring the knowledge of two children, both having an actual level of maturation of seven years, but, given the necessary stimulus, presented different prospective levels of development (one of two years ahead, whereas the other of half a year). (WERTSCH, 1985, p. 68) Moreover, as Lantolf and Thorne (2006) explain, differently from traditional assessment methods, which only point to the already attained development, "the ZPD is forward looking through its assertion that assisted performance, and importantly, the varying qualities of assistance needed for a particular individual to perform particular competencies, is often indicative of independent functioning in the future" (p. 263).

Thus, as important as it is to perceive the potential level, it is essential that we analyze the individual's actual level of development, or the Zone of Actual Development

(ZAD), or "the level of development of a child's mental functions that has been established as a result of certain already completed developmental cycles" (VYGOTSKY, 1980, p. 85). While ZAD refers to mental development retrospectively, ZPD refers to the prospective development of mind (VYGOTSKY, 1980). What is essential in the development of new zones is the mediation an individual goes through, which can come from parents, teachers or peers, as in other-mediation; or from books, manuals or websites, for example, as in object-mediation.

Key to understanding the ZPD is the idea that it is transitional (referring to a period in which the individual is within the ZPD), process-bound (instead of an achieved product, or level) and revolutionary (always in movement). In other words, the ZPD is in constant reorganization; therefore, mediation has to be in tune with an individual's dynamic ZPD. Lantolf and Thorne (2007) claim that there are two essential aspects the expert other should try to achieve when mediating others: *graduation* (when the level of assistance is adapted, granting that one is not over or under assisted) and *contingency* (when the level of assistance is conditioned to one's needs and pulled out when they are able to engage in solo activity). Also paramount to grasp the ZPD is its ontogenetic and sociogenetic nature, that is, the individual development within a social-historical-cultural scenario, with the learner possessing individual characteristics that will make certain kinds of assistance more effective than others (LANTOLF & THORNE, 2006, p. 270).

Mercer (2002), more concerned with learning and teaching scenarios, coined the term Intermental Development Zone (IDZ), referring to the joint activity a teacher and a learner engage in, creating "a shared communicative space" (p.141), with the basis of their common knowledge and aims. The IDZ is constantly reconstituted as the dialogue goes on, with teacher and learner working out their way along the task they are involved in. Ideally, provided that the quality of the zone is successfully sustained, the teacher may make a learner go beyond their actual capabilities, who then is able to start internalizing this experience as new knowledge. However, if the interaction does not succeed in keeping the teacher and learner minds mutually in tune, the IDZ fails, interrupting the mediated assistance. As Mercer explains, "The IDZ is a continuing event of contextualized joint activity, whose quality is dependent on the existing knowledge, capabilities and motivations of both the learner and the teacher" (MERCER, 2002, p. 141).

The author also proposes the term *interthinking*, or "use of language for thinking together, for collectively making sense of experience and solving problems" (p. 1), which

happens not only between teacher-learner, but between peers as well, a notion similar to the Vygotskyan other-mediation, however having different characteristics, like a more playful nature, less hierarchy and a more relaxed atmosphere. Therefore, the IDZ is present in any dialectical, coordinated, joint activity, with anyone who can create an interaction that is attuned to the other's capacity of understanding. In this sense, the IDZ, similarly to Vygotsky's ZPD, does not refer to a thing or a place, but an activity, where, as far as teacher education is concerned, both teacher educators and teachers strive to be in tune with each other's dynamic states of knowledge and understanding in the practice of L2 teacher education.

Wertsch (1985) elucidates the concept of *intersubjectivity* to refer to the consonance of understanding between the people involved in a joint activity, which happens "when interlocutors share some aspects of their situation definition" (p. 159). Intersubjectivity happens at various levels, which are created as interlocutors communicate with each other, externalizing their understandings. Wertsch (1985) cites Rommetveit (1979) to explain that the goal of communication is to transcend the individual worlds of the participants, setting up "states of intersubjectivity" (WERTSCH, 1985, p. 159). Communication happens when the shared background knowledge between participants serves as a basis for interlocution, which should be externalized so that possible misunderstandings can be clarified. In this vein, for effective communication to happen, it is paramount that individual's ideas and opinions do not remain in the private sphere, but are externalized in order to grant a common understanding. In this sense, Vygotsky (1987) believed that speech does not equal putting preexisting thoughts into words, as the "thought is restructured as it is transformed into speech. It is not expressed but completed in the word" (VYGOTSKY, 1987, p. 251).

In this sense, Vygotsky (1987) refers to instances when there is cognitive-emotional dissonance within an individual, who claims one thing and acts in divergence with his claims. When he realizes that cognitive-emotional dissonance, which usually happens in the midst of interpsychological processes, that "discovery" is so disappointing and profound that it serves as a catalyst for teachers to perceive learners' possible areas for development, or "growth points" (JOHNSON & GOLOMBEK, 2016). According to the authors, growth points create a temporary instability that enables the arousal of potential learning, examples of the *mediatee's* effort to understand concepts, that once signaled by the mediator, can then be elucidated and

worked on, using responsive mediation for teacher learning and development. In order to better achieve that, it is essential that the mediator perceives and takes into account the particular emotional experiences the *mediatee* has gone through, what Vygotsky termed *perezhivanie*, "the subjective significance of lived experiences that contribute to the development of one's personality, especially the emotional and visceral impact of lived experiences on the prism through which all future experiences are refracted" (JOHNSON & GOLOMBEK, 2016, p. 42).

Instances of emotional-cognitive dissonance can be found in various contexts, as in teacher education, when for instance teachers realize that their actions conflict with the pedagogical concepts being (or having been) presented to them, which so far had come unnoticed, due to either the fact that there were misconceptualizations, or simply because the teachers had not had the opportunity to reflect on their pedagogy, having acted upon the performance level (and not upon the competence one), perhaps derived from *apprenticeship* of observation (LORTIE, 1975).

For Vygotsky, one form of qualitative change happens when there is the emergence of contradictions between what the child is able to do, their emotional-affective needs, and surfacing higher mental functions. During these periods, the child experiences different developmental stages, which are marked by dialectical interactions between mediator and *mediatee*, trying to balance the contradiction. When the child is able to transcend the dissonance and their thought is unified with the mediator's, it is an indication that a new understanding of a situation has emerged, signaling that they have a new relation to the environment. Similarly, teacher education also gains a new understanding if we consider teachers' cognitive/emotional dissonances, as a trigger to professional development:

L2 teacher education programs are often a period of tremendous emotional/cognitive dissonance, as students are repositioned as teachers, as *everyday concepts* about teachers and teaching (i.e., the apprenticeship of observation) are reconceptualized through *academic concepts* (i.e., theoretical learning), as new identities, meanings, and ways of being emerge, as new *perezhivanie* about their experiences are formed, and a time during which human mediation, (...) is absolutely critical in cultivating teachers' professional development. (JOHNSON; GOLOMBEK, 2016, pp. 58 -59)

Therefore, summarizing the ZPD from a teacher education prism, it is paramount that the level of instruction is suitable to what an individual teacher is able to understand, trying to minimize the possible dissonance originated from dialectical interactions by externalizing pedagogical concepts that emerge during the interactions, which creates growth points for the

development of the teacher. In the next subsection, I will go about one of the ways in which ZPD and mediation can foster the development of an individual.

# 2.1.2 Dynamic Assessment: the developmental analysis of one's potential world

Unsettled by the way traditional psychological assessment had been carried out at the time, Vygotsky proposed a new way of analyzing one's learning trajectory, based not on achieved results (or product-oriented, standardized assessment), but on ongoing processes of development, how learners make progress, aiming at a prospective development within the learner's ZPD. As Poehner and Lantolf (2005) put it, in Vygotsky's ZPD "assessment and instruction are dialectically integrated as the means to move towards an always emergent (i.e., dynamic) future, rather than a fixed and stable steady state" (pp. 237-238). Vygotsky's original idea, the assessment of the ZPD, referring to it as an "experimental-developmental method" and "dynamic analysis" (VYGOTSKY,1998, pp. 81-82), has given rise to an array of different approaches towards evaluation, generically called in VSCT as Dynamic Assessment (DA), initially introduced in the West by Luria (1961), as a psychological assessment procedure, then first used in education by Feuerstein and Hoffman (1979), and with different terminologies by other authors (i.e. learning potential assessment by Budoff (1968); testing the limits approach by Carlson (CARLSON; WEIDL, 1978, 1979); mediated assessment by Burns et al. (1987); assessment via assisted learning and transfer by Campione and Brown (1990), among others).

As previously explained, the ZPD refers to abilities in the process of maturation that are fostered by the more expert other, in a mediational relation, or as explained by Newman *et al.* (1989), "the productive intrusion of other people and cultural tools in the [developmental] process" (NEWMAN *et al.*, 1989, p. 68). As Poehner and Lantolf (2010) explain, "The ZPD entails co-mediation between someone who has the knowledge and capacity to attain a goal and someone who does not but who is able to participate in the process to some extent." (p. 317). Instead of directing the learner to a desired outcome, the expert is supposed to guide them toward the aimed result "in a way that encourages the learner to take as much responsibility for the joint process as possible, to withdraw support when appropriate, and to reintroduce it when needed" (p. 317).

When applied to second language instruction, there are two approaches when using DA: Interventionist and Interactionist. In the Interventionist approach the learner is either assessed by the use of pretest-treatment-post-test experimental approach, or presented with a pre-determined and fixed set of clues scaled from implicit to explicit (having as a theoretical basis that learners who respond appropriately to implicit mediation have reached a degree of control over the educational object, not needing explicit assistance). Conversely, in an Interactionist approach, the learner does not receive prefabricated mediation; instead, it is negotiated, that is, "continually adjusted in accordance with the learner's responsivity" (POEHNER; LANTOLF, 2010, p. 318). Importantly, the way one applies the newly learned knowledge in novel situations is referred to as transfer and transcendence, the former relative to how the learner adapts the mediated internalized knowledge to other situations, and the latter, besides that, referring to how the learner shifts their actual developmental level as response to the mediated activity (p. 317). Feuerstein et al. (1979, p. 92, cited in POEHNER; LANTOLF, 2005) explain transcendence by stating that "true development transcends any specific task and manifests itself in a variety of ways under a multitude of differing conditions." (POEHNER; LANTOLF, 2005, p. 241)

Although widely discussed in Second Language Teaching for over five decades (ALJAAFREH; LANTOLF, 1994; FEUERSTEIN: RAND: HOFFMAN, 1979; GOLOMBEK'S, 2011; BROWN; FERRARA, 1985; GUTHKE; HEINRICH; CARUSO, 1986; LANTOLF; POEHNER, 2011; POEHNER, 2008, to name a few), the DA approach has been little applied in teacher education (DAVIN; HERAZO; SAGRE, 2016; GOLOMBEK, 2011; MCNEIL, 2018). Unlike its original interventionist testing aim, the goal in teacher education is not a testing procedure, but developing teacher reasoning by using the systematically joint exchanges between teacher educator and teacher (or teacher-to-be) so as to develop awareness of pedagogical choices, objectives and results, which should ideally be then verifiable in subsequent attempts made by teachers, as a "springboard for exploring the extent to which they were [are] able to reduce the distance between their present and their future." (POEHNER; LANTOLF, 2005, p. 259).

In Golombek's (2011) article, the author describes how, by the use of Dialogic Video Protocols (DVP), she mediated the development of a teacher's pedagogical concepts as they emerged, engaging the teacher-to-be in a social practice that while integrating learning and assessment, aimed at promoting expert thinking. The use of DVPs as a tool through which the teacher's practice is viewed by the teacher him/herself, along with the mediation of a more

expert other, is a powerful tool in promoting teacher reasoning due to eliminating problems of lack of or selective memory: the practice is there, at anyone's disposal for scrutiny.

Golombek (2011) explains that DA involves mediator and learner in a type of dialogic cooperation, "with the mediator continually assessing the learner's understanding in order to determine an appropriate mediational response" (p. 124). She provides some examples of strategies brought by Vygotsky (1987, 1998) in mediator-mediatee interaction, like "demonstration, leading questions, and by introducing elements of the task's solution" (VYGOTSKY, 1987b, p. 209, cited in GOLOMBEK, 2011, p. 124), or more specifically: by demonstrating the resolution of a problem, checking if the mediatee was able to solve the problem by imitation; by initiating the resolution of a puzzle, then checking if the mediatee was able to continue solving it; by empowering the mediatee to solve the problem by interacting with a more capable other; or by explaining the concept underlying the issue (VYGOTSKY, 1931/1997, p. 202). Golombek made use of interactionist DA, allied with Aljaafreh and Lantolf's (1994) notions on contingent (from implicit to implicit), graduated and dialogic mediation, by means of stimulated recalls (CALDERHEAD, 1981) in the form of DVPs, assuming that "the teacher educator's role is to intervene directly during the process and be responsive to the teacher-learner's understandings of teaching" (GOLOMBEK, 2011, p. 125). The author also advocates the use of DVPs as enabling a more systematic analysis both retrospectively (what happened) and potentially (what could have happened). As she asserts, "(...) the teacher educator can determine whether the teacher-learner, when prompted, can articulate responses that embody conceptual thinking" (p. 125). Supported by Wertsch's (1985) concept of *intersubjectivity*, Golombek explains that "Intersubjectivity, in this case, the teacher-learner's understanding of the situation from the teacher educator's point of view, that is, the more expert viewpoint, is necessary for their interactions on the interpsychological plane to move to the teacher-learner's intrapsychological plane" (GOLOMBEK, 2011, p. 125).

In her study, derived from an ESL course she taught about teaching pronunciation, teacher-learners were asked to practice teaching both at microteachings and real classes. The researcher attended and videotaped the participant teacher-learners' classes and also videotaped their DVPs, in which both the selected teacher-learner and the mediator could stop the video at any point they thought worth discussing. By using an inductive procedure

(BOGDAN; BIKLEN, 1998), the author selected salient themes concerning problems the learner-teacher had with *engineering student participation*. During the DVP, the teacher educator employed different mediation strategies: *backchanneling to elicit explanation* (that is, providing a sound or sign to show that s/he is listening to the person who is talking, aiming at encouraging them to go on); *direct questioning to elicit an alternative instructional response* (that is, asking a direct question about what a different plan of action could have been); *voicing an expert's* response (or voicing what she as a teacher might say in a similar situation) and *eliciting reasoning behind an instructional response* (trying to get from the teacher-learner to verbalize pedagogical choices, understanding the intention behind it) (GOLOMBEK, 2011, p.133). These strategies were contingent on the teacher-learner's needs (more or less implicit or explicit), aiming at promoting expert teacher thinking and achieving intersubjectivity. The author ends the text suggesting some questions teacher educators can ask themselves when attempting to use DA:

i) Can a teacher-learner evaluate the execution of her teaching? ii) Can she identify the reasons why particular activities or interactions are problematic? iii) Can she reorient and plan a more appropriate instructional response? iv) Can she ventriloquate an appropriate instructional response? v) Can she provide robust reasoning for that instructional response? vi) Can she connect specific concepts with specific concrete teaching activity?" (GOLOMBEK, 2011, p. 134)

Even though there are no formulas when engaging in DA, strategic mediation or responsive mediation, these guiding questions may be useful in aiding teacher educators' difficult task of fostering pedagogical reasoning, mediating emerging concepts within the teacher-learner's ZPD, aiming at their internalization and ultimately teaching expertise. It is time we looked at the quality of mediation provided by teacher educators, how helpful each kind of interposition is, what potential each kind of intervention holds; not for prescriptive ends, of course, but for supporting and assisting teacher educators who, with the aid of possible protocols, adjustable to each teacher's needs, for example, may be more and more responsive to teachers and thus achieve better results. Hence, the importance and relevance of this study.

In tune with VSCT in teacher education, another key factor to consider is teacher cognition, which deals with the way teachers see their pedagogy. This aspect will be dealt with in the next section.

#### 2.2 TEACHER COGNITION

The area of language teacher education has undergone a dramatic change, especially after the 80's: a move from a technical and positivist view to an interpretative view. The former views teachers as mere transmitters of knowledge, causing what Freire (1972) called banking education, and as a consequence, a kind of teacher education organized towards a systematic training enterprise, aimed at developing effective pedagogical behavior. In its turn, an interpretative view to teacher education claims that emphasis has to be placed on teacher cognition, that is, "what teachers know, think and believe" (BORG, 2015, p.1). It is also essential to notice that the role of language teacher educators has also shifted, from one which aimed to develop teachers' skills to one interested in instigating teachers to develop an understanding of their beliefs and how these reflect on their practice (JOHNSON, 1999, 2009; JOHNSON; GOLOMBEK, 2016; RICHARDS, 2009).

This new perspective has fomented a myriad of studies in teacher education, embracing diverse areas like cognition, emotions, beliefs, identity, teachers' mental lives, dialogic mediation, collaborative practices, and sociocultural theory, to name a few (see 2018; AGNOLETTO: DELLAGNELO, BARCELOS; COELHO, 2010: **BIEHL:** DELLAGNELO, 2017; BORG, 2003, 2015; CELANI, 2010; 2018; DALLIGNA, 2017; JOHNSON, 2004; JOHNSON, 1999, 2006, GOLOMBEK; 2009; JOHNSON; ARSHAVSKAYA, 2011; JOHNSON; DELLAGNELO, 2015; RICHARDS, 2009; RUMKE-2018; SMAGORINSKY, et al, 2003; TELLES, 2009, among others)

Arruda and Gimenez (2004) map the reflective paradigm in Brazilian researchers' publications on second language education from 1998 to 2003. This article, which describes important pedagogical conceptualizations of reflection and strategies used to foster reflection in a worldwide scenario (GRIMMETT, 1988; SMYTH, 1992; SCHÖN, 1983; ZEICHNER, 1994), also traces some Brazilian studies (ALMEIDA FILHO, 1999; ASSIS-PETERSON, 1998- 1999; CASTRO, 2002; CRISTÓVÃO, 2002; CRUZ; REIS, 2002; FREITAS, 2002; LIBERALI, 2002; MAGALHÃES, 2002; MONTEIRO, 1996; ORTENZI, MATEUS E REIS, 2002; VIEIRA-ABRAHÃO, 2002; TELLES, 2002) in terms of the conceptualization of reflection and strategies used to foster reflective teaching in each of the educational contexts of pre-service and in-service. Although there was as array of strategies used to foster

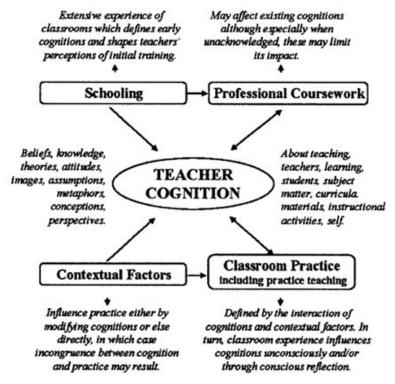
reflection (i. e. reflective journals/narratives, help provided by an expert, teacher following some pre-established set of guidelines or questions to be answered, recording of classes, microteachings, etc.). All of the aforementioned studies assert that reflection stems from practice, bringing about the re-signification of practice based on critical thinking and questioning, aiming at overcoming repetitive practices, disconnected from the improvement of language teaching.

The idea of reflection is the present study is in consonance with Dewey's concept: "to reflect is to look back on what has been done to extract the meanings which are the capital stock for dealing with further experience" (cited in GRANT & ZEICHNER, 1984, p. 108). Richards (2009) claims that teacher cognition embraces the mental lives of teachers, the way they develop, what they consist of, and how teachers' beliefs, thoughts and thinking processes shape the way they see teaching and their practices in the shoes of a teacher. Critical reflection of one's pedagogy "involves conscious recall and examination of the experience as a basis for evaluation and decision-making and as a source for planning and action" (RICHARDS, 1995, p. 59). Furthermore, as claimed by Richards (1995), critical reflection involves three stages: i) the event; ii) recollection of the event; and iii) review and response to the event (RICHARDS, 1995, p. 60). Even though there is an extensive array of relevant definitions and conceptualizations of teacher's reflective pedagogy [ZEICHNER'S (1994) technical, practical and critical levels of reflection; SCHÖN'S (1983) reflection-on-action and reflection-in-action epistemology of practice; SMYTH'S (1992) four stages for reflection – describe, inform, confront, and reconstruct; GRIMMETT'S (1988) three-fold categorization of reflection: i) "thoughtfulness about action"; ii) "deliberation and choice" of "good teaching" versus "bad teaching"; and iii) reflection as "reorganization or reconstruction of experience", to name a few], Richards's construct seems to be the one more accordant with the methodological path of this study, as the mediational strategies used by the teacher educator focuses primarily on the event (the classroom) and on the recollection of the event (the mediating sessions) with an eye on how the teacher reviews and responds to the two initial stages as she teaches again and engages in reasoning teaching.

In order to deal with this process, it is important to look at diverse facets of where cognition may originate from, how it develops, and in what ways it might impact teachers' professional lives. In this sense, Borg (2003) proposed a framework encompassing three aspects: i) cognition and previous language learning experience, ii) cognition and teacher education, and iii) cognition and classroom practice, which can be expanded to schooling (1),

professional education (2), contextual factors (3) and classroom practice (4). Figure 3 details these aspects:

**Picture 2:** Framework on different aspects of teacher cognition - schooling, professional education, contextual factors and classroom practice.



Source: BORG, 2003, p. 82.

These aspects, although different in nature, shape the way in which cognition develops. Considering the first aspect, cognition and previous language learning (what Lortie [1975] called "apprenticeship of observation"), it is important to point out that teachers' experiences as learners and as observers of other teachers have a substantial impact on the way they understand teaching. These models, although subconscious, may greatly influence teachers-to-be, to the point of preventing change, even when teachers consciously believe in a given pedagogy. Johnson (1994) notes that "preservice ESL teachers' beliefs may be based largely on images from their formal language learning experiences, and in all likelihood, will represent their dominant model of action during the practicum teaching experience." (JOHNSON, 1994, p. 450). The role of teacher education concerning this aspect might be one that brings up teachers' memories as students, eliciting how these beliefs might affect their identity as teachers. By making teachers acknowledge how these models may influence their

practice, teacher educators can then create possibilities that might unfold where teachers' unconscious behaviors stem from, hence making them available for pedagogical awareness.

Beliefs ought to be considered when talking about teacher education, since they modify the way teachers see their reality, influencing their thinking process, reasoning and pedagogical behaviors (JOHNSON, 1999). Moreover, "the strong affective and evaluative component of teachers' beliefs makes them seem more inflexible and open to critical examination" (JOHNSON, 1999, p. 30). Still according to the author, due to the fact that beliefs are composed of affective, cognitive and behavioral facets, they affect our knowledge, feelings and attitudes. Notably, the *strength* of beliefs plays a part in a teacher-to-be's developmental process. According to Pajares (1992), "the earlier a belief is incorporated into the belief structure, the more difficult it is to alter" (PAJARES, 1992, p. 317), because they influence the way we perceive and process information. The origin of teachers' beliefs basically derives from their experience as students and as teachers, encompassing their practice, as well as education (RICHARDSON, 1996; RICHARDS; LOCKAHRT, 1994).

Barcelos (2006) provides an overview of how beliefs have been studied in teacher education, with an earlier (70's and 80's) normative assumption that beliefs were stable and fixed mental structures, which were inside people's minds, and apart from knowledge. As beliefs were considered right or wrong, there was an idea of cause and effect related to them. However, this position has shifted, with studies from the beginning of 2000 focusing on beliefs as situated and context-based. Barcelos and Kalaja (2003, cited in BARCELOS, 2006, pp. 19-20), provide a new conceptualization of beliefs as: i) dynamic (shifting from time to time); ii) emergent, socially constructed and contextually situated (originating from the sociohistorical context we dwell in); iii) experiential (anchored in past experiences and interactions); iv) mediated (as mediational means used to regulate learning [DUFTA, 2003], which may be used in social interactions); v) paradox and contradictory (may be both empowering or hindering as regards SLT); vi) related to action in an indirect and complex way (they do not necessarily influence actions) and vii) somewhat similar to knowledge (being similar to teacher cognition).

Recent studies by Borg (in BIRELLO, 2012) provide a distinction between *core* and *peripheral* beliefs, the former referring to the ones that will likely be more difficult to be changed. The importance of this notion has to do with the extent to which teacher education might affect beliefs, one aspect I will subsequently look into.

The second aspect Borg points out, namely, cognition and teacher education, is related to teachers' educational development (whereas in academia, pre-service and in-service programs, language seminars, etc.), and that is where peripheral beliefs might change. When teachers start their professional development, they have a baggage of accumulated experience that is turned into pedagogical beliefs, which may be stable and resistant to shift (JOHNSON, 1999). The impact pedagogical education has on teachers' development is analogous to how much they make sense of the concepts they are exposed to: their developmental process is personal and presents diverse outcomes. However, this process is not a linear one: it develops over time and exposure, and concepts are not accumulated in a fixed repertoire of knowledge. Instead, concept development goes forward and backwards, and knowledge is reorganized when presented with new concepts (SENDAN; ROBERTS, 1998). When unacknowledged (BORG, 2003), the effects of education might not be meaningful, and thus change might not take place. However, a large number of studies (AGNOLETTO; DELLAGNELO, 2018; ALMARZA, 1996; BIEHL; DELLAGNELO, 2017; FREEMAN, 1993; JOHNSON, 1999, 2009) corroborate the impact of teacher education in changing beliefs, either acknowledged by teachers' testimonies or by evidence from their practice. Kennedy points out that:

teachers need to be provoked to question their experiences and to question their beliefs that are based on those experiences. Provocation is most likely to occur in conjunction with vivid portraits of alternative models of teaching and a stimulus that focuses on teacher's attention on the difference between this example and the teacher's tacit model of teaching. (KENNEDY, 1991, p. 9)

In order for teachers to transform their beliefs into reasoning and a modified practice, they need to know what their beliefs are, question them in light of the pedagogical knowledge learned, moving away from what they feel to what they are intellectually aware of, and try to solve these conflicts (feeling versus knowing) by constant self- reevaluation. The role of teacher educators, thus, might be to access (i.e. by questionnaires, interviews, or personal journals) the nature of these beliefs, bring them to the surface, scrutinize them, and anticipate, according to knowledge about the ZPD of individual teachers, the kind of mediation that will be more helpful for them, personalizing the kind of assistance made available to each one.

The third aspect Borg brings about is cognition and classroom practice. Practice is a much debated and recognized topic in teacher education literature. Some authors refer to Teaching Practice, others to Practicum (JOHNSON, 1999, 2009; ONG'ONDO; BORG, 2011;

RICHARDS, 1991). At the heart of the essential role of teaching practice is "provid[ing] teachers with opportunities to 'develop the pedagogical reasoning skills they need when they begin teaching." (RICHARDS, 1998, p. 78, cited in ONG'ONDO; BORG, 2011, p. 510). Some aspects pointed out by Borg (2003) are worth mentioning when talking about cognition and practice: teachers' decision-making processes (the reasons why teachers take certain decisions when planning classes, for instance in order to facilitate students' learning and motivate them); teachers' in-flight decisions (the motives of unplanned decisions, for instance to adapt to learners' performance, or to seize pedagogical moments, as well as respect students' moods, to cite a few); the influence of context (where and how the classes are administered, and the impact of these realities); the relationship between cognition and experience (to what extend the experience teachers have shape their pedagogical understanding); PPK (Personal Practice Knowledge), how teachers bridge their previous experiences to new ones, for instance what might work better in teaching a certain language aspect) and how BAK (Beliefs, Attitudes and Knowledge) may foster or hinder teacher cognition.

Overall, pedagogical principles – the rationale behind teacher's actions – are individual at the same time that they tend to be shared by communities of teachers in similar contexts. Importantly, Tsui (2005) noted that it is not enough to deduce what teachers explicitly know in determining their level of expertise; instead, it is how teachers apply their knowledge in their practice that reveals where the teacher's expertise spectrum lies. As Johnson and Freeman (2001) claim "(...) how teachers actually use their knowledge in classrooms is highly interpretive, socially negotiated, and continually restructured within the classrooms and schools where teachers work" (JOHNSON; FREEMAN, 2001 p. 56)

## Teachers' pedagogic reasoning

refers to the ability to think critically about the relationship between procedures and principles in teaching. It involves seeking to understand the reasons for instructional actions and comprises the decision-making and problem-solving skills that teachers call upon during both the pre-active and interactive phases of teaching (ONG'ONDO; BORG, 2011, p. 510)

The twofold awareness teachers should have when engaging in reflective teaching can be called *in-action* (i.e., in the moment) and *on-action* (i.e., subsequent to the lesson) – (SCHÖN, 1983). Examples of in-action reflection might be realizing a task is not going well and modify it during class; on the other, an on-action instance might be the perception that there was something missing in a class, which happens post lesson. Nevertheless, teachers

might have difficulty in managing all these aspects, either due to lack of time, or of knowledge. Teachers usually depend on another peer or teacher educator to mediate this reflective process.

The role of teacher educators concerning this reflective process ideally is of a mediator and facilitator, one that enables teachers to make bridges between the theory learned and their practice. The type of aid provided by teacher educators is of assistance, guidance and reassurance. According to Bailey (2006)

The supervisor's role is to help novice language teachers make connections between the material in their training courses and the classroom contexts they face ... the supervisor may need to guide them as they build bridges between the research and theories they have studied and the realities of the classroom teaching ... so in addition to providing practical tips, supervisors' feedback can promote reflective practice and socialize novices into the professional discourse community. (BAILEY, 2006, p. 240)

Thus, the role of teacher educators is of vital importance in fostering teachers' cognitive development and promoting change. According to the framework provided by Borg, this movement involves fostering teachers' awareness, aligned with the introduction and/or negotiation of concepts, and a correlation from theory and practice. Teacher educators should ideally provide assertiveness and acceptance, providing effective guidance, as teachers not only benefit from the teacher educator's expert knowledge, but also feel free and at ease to explain and justify their pedagogic choices. During this process, it is paramount that both teacher educators and teachers be attentive to perceive difficulties, and that teachers be open to modify their practice.

Clearly, it is naïve to consider that only by engaging in a reflective process, either with or without the mediation of others, i.e. a teacher educator, teachers will inevitably change their practice. Oliveira (2013) argues that the path to become a reflective teacher is not in a straightforward way; rather, it is a bold and long process; albeit a great number of teachers-to-be usually have an immediate and shallow view of what reflective teaching means, limiting themselves to engaging in non-systematic, positivistic processes. The author reinforces the importance of psychological strength and the support by teacher educators, so that teachers do not quit the profession.

Moreover, there is a great possibility that teachers have rooted beliefs, values, concepts and principles concerning teaching that are embedded in their lifelong experience as

learners, resulting from what Lortie (1975) called *apprenticeship of observation*. It usually comprises a person's memories of how they should behave as students, and their recollections of the teachers they have had in their lives, and the way these former teachers taught (JOHNSON, 1999, p. 19). These entrenched beliefs might shape the teacher-to-be when they engage in actual teaching to the point of, even after having gone through pre-services or inservices, perpetuating the pedagogical aspects they have experienced as students. Thus, it is of vital importance that these rooted beliefs are brought to light and verbalized, with the teacher educator and the teacher engaging in dialogical interaction, so that these convictions can be discussed and questioned. (ABRAHÃO, 2002, p. 61)

Also aiming at teacher development, Johnson (1999) refers to *reasoning teaching* when addressing teacher cognition, defining it as follows:

knowing what to do in any classroom depends on a wide range of considerations, and the ways in which teachers think about these considerations, or what I have come to call *reasoning* teaching, lie at the core of both learning to teach and understanding teaching. (JOHNSON, 1999, p. 1)

Johnson (1999) points out that reasoning stretches beyond teachers' awareness of what, for whom and where to teach, also involving how and why to teach and what teachers think while teaching. This knowledge is rooted in how teachers perceive teaching, stemming from their roles as students, previous teachers, and the contexts of teaching. In order to achieve robust reasoning teachers need to understand where their pedagogical knowledge comes from, how and why they teach as they do, and the way they may (re)shape their pedagogy over time:

Robust reasoning emerges when teachers expand their understandings of themselves, their teaching, their students, and their classrooms and schools. It emerges when teachers engage in a continual process of "criss-crossing" their professional landscape, seeing and experiencing it from multiple perspectives, recognizing its inherent complexity, and considering the interconnectedness of its various components. Robust reasoning occurs when teachers are able to assemble and apply their knowledge of their professional landscape flexibly so that it can be used in different situations and for different purposes (see Spiro et al., 1987). (JOHNSON, 1999, p. 2)

Johnson (1999) points out that robust reasoning may be hard to be achieved by teachers on their own, maybe due to the hardships of the routine of a teacher or the lack of awareness related to their own pedagogy. In order to deal with this, the author recommends that teachers engage in collaborative work with peers, who may then pinpoint and share pedagogical perceptions that might come unnoticed to one (p. 11). Accordingly, in this study the dialogic collaboration between the teacher educator and the novice teacher aimed at

stimulating robust reasoning, hopefully engaging the teacher in constant critical reflection about their own knowledge and practice. It is also key to understand that teaching is a fluid, to-the-moment task, and that

in teaching, it depends; and who can articulate what it depends on will develop complex, flexible, conceptual understandings of themselves, their students, their classrooms, and their schools, and will be able to use their knowledge in different ways, for different purposes, and in different instructional contexts, enabling them to provide truly effective teaching practices. (JOHNSON, 1999, p. 12)

Although fostered by others, robust reasoning "emerges within teachers themselves" (p. 10), it develops from inside out, from teachers' deep understanding of how they see teaching, and how they realize themselves in this process.

#### 2.3 SUMMARY OF THE CHAPTER

This chapter elucidated the main tenets of the VSCT to be worked with in this study, bringing the notions of mediation, concept development, internalization and ZPD separately, although when considering one's learning and development they are all intertwined: by being mediated (by people or things) one builds their subjectivity, internalizing concepts that are worked and negotiated within their dynamic ZPDs. Hence, the importance of applying these concepts in teacher education, by engaging in strategic or responsive mediation, via DA, for example, elucidating emerging concepts, striving to adapt them to the teacher's ZPD, taking into consideration this teacher's *perezhivanie* and being attuned to their growth points. This way, the teacher educator may be able to influence this teacher's cognitive development.

Aligned with this perspective, different aspects come to play when teacher educators strive to implement teacher cognition, like beliefs, previous experience, engagement, openness to operate change, the contexts of teaching, teachers' schooling, attitudes, etc. The role of teacher education, thus, is to bring these aspects to the surface, enabling a better understanding of their origins and impact, hence finding ways to better go about teachers' cognitive developmental process. Fundamental to understanding teacher cognition is the idea that cognition itself is constantly emergent, originating and structured by engagement within social activities (JOHNSON; GOLOMBEK, 2011), and hence, fluid. It is the goal of this

study to elucidate which actions the teacher educator has taken that might have caused a higher or lower impact in teachers' cognitive pedagogical development.

#### 3 METHOD

#### 3.1 INTRODUCTION

The goal of this chapter is to present the methodology used in this study. First, I outline the nature of this study. Next, I reiterate the research objectives and questions already displayed in the introduction. Subsequently, I provide a description about the context of investigation, approaching the setting (the Language Institute where the data was collected, information about the classes and the pedagogical guidelines adopted in this study). Afterwards, I describe the participants of this study, as well as the criteria for the participant's selection. Then, the procedures for data collection are described. Finally, I describe the procedures for data analysis, with a detailed description of the mediating sessions and the approach taken for the analysis, followed by the ethics review board approval number.

#### 3.2 NATURE OF THE STUDY

The present study was conducted as a case study, given that it refers to one specific example of a teacher being mediated by a teacher educator. As Yin (2005) puts it, "the strength of the case study method is its ability to examine, in depth, a "case" within its "real-life context" (YIN, 2005, p. 380), characteristics that were contemplated by collecting the data from a teacher's real teaching practice, along four months. Critics to case study claim that it is not always possible to draw generalizations from this type of research, which can be debated, as Denscombe (1998) claims that "the extent to which findings from the case study can be generalized to other examples in the class depends on how far the case study example is similar to others of its type" (DENSCOMBE, 1998, pp. 36–37). The conducted study could be reproduced in contexts similar to the ones that will subsequently be presented, thus generalizations may be made as regards to teacher development. An important point is also made by Bassey (1981), referring to the importance of reliability over generalizability when deciding on the merit of a case study:

An important criterion for judging the merit of a case study is the extent to which the details are sufficient and appropriate for a teacher working in a similar situation to relate his decision making to that described in the case study. The relatability of a case study is more important than its generalizability. (BASSEY 1981, p. 85)

As will be presented subsequently in this chapter, the details referring to the context of this investigation, the setting, participants, criteria and research constructs are fully detailed, to assure its reliability. Bassey (1981) also points out that case studies are valid types of educational research provided they are conducted systematically and critically, aiming at improving education, and as long as the scope of the existing knowledge in the area can be broadened by the publication of their findings. Once more, in the subsequent sub-sections the reader will find examples of these issues.

Given the nature of this study, it will follow a qualitative paradigm, or "the analysis by directly reflecting upon and trying to interpret data" (ALLWRIGHT; BAILEY, 1991, p. 65). As Bortoni-Ricardo (2008) explains, the focus of the researcher in qualitative analysis is in the process that happens in a specific setting, seeking to investigate the way in each the social actors involved understand this process.

The analysis will be conducted *microgenetically*, aligned with a sociocultural perspective (BIEHL 2016; JOHNSON, 2009; JOHNSON; DELLAGNELO, 2013; LANTOLF; THORNE, 2006; VYGOTSKY, 1980, 1987; WERSTCH, 1985), focusing on the perceived changes in the teacher's practice possibly caused by the different mediational strategies employed by the teacher educator. According to Lantolf and Thorne (2006), a microgenetic study is a "very short longitudinal study" (LANTOLF; THORNE, 2006, p. 52), which is distinguished by directly observing the shifts that occur at an ontogenetic level (with a person) along their individual path to learning. This type of analysis takes into account a specific aspect within a specific time span, "making explicit the moment-to-moment revolutionary shifts that lead to development of independent mental functioning" (JOHNSON; DELLAGNELO, 2013 p. 415). In this sense, this study will focus on the influence of the mediation provided *vis-a-vis* the pedagogical change noticed along the mediational interactions between the teacher educator and the teacher.

In order to accomplish that, I will analyze how the mediation configuration used by the teacher educator impacted the development of the teacher, given that some concepts were more easily understood than others, from an interpsychological level (between her and me) to an intrapsychogical one (on the way to her internalization).

#### 3.3 OBJECTIVES OF THE STUDY

As stated in the introduction, the purpose of this study is to analyze the mediation configuration used by the teacher educator as compared to the development of the teacher so as to draw a relationship between these two aspects (mediation configuration and teacher development), given that some concepts were more easily understood than others. As explained earlier, this study build on my Master thesis, aimed at tracing the development a teacher underwent via expert other mediation. During the analysis of the data then, I noticed that two of the pedagogical constructs worked with had different learning paths. These concepts, namely *contextualization* and *modeling*, although present in all the classes observed, and tackled in all mediating sessions, presented different outcomes as far as internalization was concerned. Thus, I intend now to investigate the reasons why these two concepts were so distinctively learned, and also analyze two other pedagogical concepts within the guidelines of the Language Institute (*instructions* and *links*), which also presented discrepancies in relation to pedagogical maturation.

The mediational configuration referred to in this study relates to what the TE did and how she and the teacher discussed the pedagogical topics dealt with in the mediation sessions, strategies such as asking for clarification, eliciting from the teacher, explaining pedagogical concepts, showing the teacher's guide, asking the teacher to explain her reasoning for pedagogical choices, among others, which can be understood as belonging to a continuum ranging from more implicit (using the concept of "intentional implicit" presented in BIEHL, 2016), to more explicit. Moreover, the kind of mediation, as far as systematicity is concerned, will also be taken into account. It is paramount to point out that the data, because it was collected with another purpose, makes this study of invaluable importance, as the mediation configuration was not pre-planned, but arose from spontaneous interactions between teacher educator and teacher. The strategies will be fully detailed in the Data Analysis section.

## 3.3.1 Research questions

Thus, the Research Question (RQ) of this study is:

To what extent did the mediation configuration provided by teacher educator impact teacher development?

In order to answer this general question, three specific questions are asked:

- RQ 1: Which pedagogical aspects have been approached along the eight mediating sessions?
- RQ2- What mediating strategies were used by the TE to mediate the teacher along the eight mediating sessions?
- RQ3- Can we draw a relationship between the pedagogical aspects developed by the teacher and the strategies used by the TE, along with the frequency in which they occurred? If so, what does this relationship look like?

#### 3.4 CONTEXT OF INVESTIGATION

# 3.4.1 Setting: Language Institute, classes and pedagogical guidelines

The Language Institute (LI) where the study was conducted is a franchise that has been in operation for over sixty years, encompassing the teaching of English and Spanish as a foreign language. At the time of the study, it had over four hundred schools spread all over Brazil, with around one-thousand-five-hundred employees and seventy-thousand students. According to the site of the school, its main objective is to make learners think, interpret and speak a foreign language without realizing they are learning, aiming at not only fostering language learning, but also enabling students to become better citizens. Among the pillars of the company, innovation and modernity stand out, being pioneer in using audiovisual materials in classes, recently with the application of e-boards, as well as being the first language school in Brazil to implement a distance learning website. The institute was also the first language franchise to standardize its courses according to the Common European Framework of Reference (CEFR), having the levels with a seal correspondent to the six levels

of the framework (levels A1, A2, B1, B2, C1 and C2)<sup>2</sup>. The company has won twenty-five awards for excellence in the franchising segment by ABF (Associação Brasileira de Franchising). Its mission is to facilitate the access to different world view through the teaching of English and Spanish, inspiring people to widen their universe of experiences and possibilities, and its values are: authenticity, inspiration, proximity, diversity and sustainability.

The LI uses a communicative approach to language teaching, besides advocating the understanding of learning following a sociocultural perspective (according to the pre-service materials, in which Vygotsky is mentioned). On top of that, the LI adopts task-based learning, which can be noticed by the use, in the pre-service material, of the construct of tasks as designed by Nunan (1989),

A task is any activity or action which is carried out as the result of processing or understanding language (i.e., as a response). For example, drawing a map while listening to a tape, listening to an instruction and performing a command, may be referred to as tasks. (NUNAN, 1989, p. 280).

The class plan model adopted by the LI was called TAF (Task Analysis Framework, see Appendix A), clearly following a task-based paradigm. The TAF was supposed to help and guide teachers when preparing their classes. As this study was conducted in this environment, these guidelines for class preparation were the foci of the mediation sessions.

The TAF is based on the notions of Communicative Task by Nunan (1989), that is

A piece of classroom work which involves learners in comprehending, manipulating, producing or interacting in the target language while their attention is principally focused on meaning rather than form. The task should also have a sense of completeness, being able to stand alone as a communicative act in its own right. (NUNAN, 1989, p. 10)

In this sense, each class activity (which involves a specific skill or goal) is considered a different task; for instance, a listening task, a speaking task, a reading task, a writing task, etc. Therefore, one class had more than one task (usually from two to three), which in turn determined the number of TAFs per class.

<sup>&</sup>lt;sup>2</sup> "The Common European Framework provides a common basis for the elaboration of language syllabuses, curriculum guidelines, examinations, textbooks, etc. across Europe. It describes in a comprehensive way what language learners have to learn to do in order to use a language for communication and what knowledge and skills they have to develop so as to be able to act effectively. The description also covers the cultural context in which language is set. The Framework also defines levels of proficiency which allow learners' progress to be measured at each stage of learning and on a life-long basis". (Source: https://www.coe.int/t/dg4/linguistic/source/framework en.pdf)

The TAF guidelines were also based on Nunan's definition of task components, "the definition of a learning task requires the specification of four components: the goal, the input (linguistic or otherwise), the activities derived from this input, and finally the roles implied for teacher and learners" (p. 47). Based on the paradigm before mentioned, the TAF guidelines are (POLIFEMI, 2009): goal, input data, grouping, instructions, procedures (subdivided into preparation, performing and accountability), link to the next task and related homework. In order to prepare a class following the TAF, teachers were supposed to answer questions related to the specific component dealt with. The questions were:

- 1. Goal (What for? Why?): i) By the end of the task, what should students (Ss) be able to do?; ii) Which of the communicative competences (sociolinguistic, grammatical, discourse or strategic) is/are the focus of the task?
- 2. Input Data (What to use?): i) What kind of input data is available for Ss to accomplish the task?; ii) Besides the book, what sources of information can be explored/used?
- 3. Setting/ Grouping (What kind of arrangement?): i) How are Ss going to work? Individually, open pair, pair work, small groups? Why? What for?; ii) How are you going to change the setting configuration?; iii) What kind of interaction will this task generate? Teacher (T)- (Ss)? Ss- Ss?
- 4. Instructions: i) How are you going to tell the Ss what they are expected to do? (i.e. will Ss read, silently or aloud; will you explain the instructions?); ii) Are instructions clear and brief?

#### 5. Procedures

- 5.1 Preparation: i) How are you going to set the mood for the activity and contextualize it?; ii) Do Ss perceive the goals of the task?; iii) Will there be modeling? How is it going to be carried out? Why?; iv) How can information brought up by Ss be incorporated into the lesson?
- 5.2 Performing: i) Do Ss work at their own pace?; ii) How will you deal with early finishers?; iii) In what occasions do you think you might interrupt Ss' performance?
- 5.3 Accountability: i) How are the learning results evaluated?; ii) How do Ss share the outcome of their learning
- 6. Link to the next task: How is the task linked smoothly into the next task?

7. Related Homework: i) Is the homework assigned by the teacher related to the goal of the class?; ii) Do you explain/ model the homework

(See Appendix A for TAF model).

Novice teachers to this institute – no matter if they are not indeed novice in the career – have to go through a mandatory 40 to 60-hour pre-service program. This is actually part of the selection process, in which prospective teachers who, after this program, are considered not suitable/interesting for the institute and are thus dismissed. The syllabus of the pre-service course (called TEP - Teacher Education Program) consisted of a theoretical mode, contemplating the learning theory (Sociocultural) and the teaching methods (communicative and task-based approaches) underlying the classes to be taught. The TEP was carried out via workshops, conducted by the teacher educator, as well as more experienced teachers, where prospective teachers were invited to discuss and share thoughts, working individually, in pairs, or groups. The workshops aimed at instructing candidate teachers about the concepts and rationale adopted by the LI, as well as promoting an understanding of pedagogical issues.

The syllabus of the preservice course included: i) The LI's business and educational philosophy (where prospective teacher got acquainted with the school's mission, values, numbers, and resources; ii) The LI's educational attitude, encompassing the institute's view on what a good school is, and the role of the teacher as an educator; iii) The LI's methodological practice, when prospective teachers were introduced to the coursebooks the school works with (devised by the institute's applied linguistic center), the goals of the different sections in each coursebook, besides getting to know the educational theories the institute follows, concepts based on communicative and task based approaches, like communicative competence by Canale (1983), the idea of communication as stated by Savignon (1991), the concept of task as stated in Nunan (1989); a section focusing on how the pedagogical principles are approached in the four skills related to language learning, namely speaking, listening, reading and writing. At the end of each skill module prospective teachers were grouped in pairs and prepared a lesson concerning that specific skill, which was then microtaught, with a follow-up feedback session conducted by the teacher educator and the peers.; iv) The LI's guidelines for evaluation, focusing on process evaluation and formative feedback.; v) A practical module (microteachings - the last part of the preservice is aimed at putting into practice all that had been discussed in the preservice, when prospective teachers were requested to individually plan and *microteach* a whole class, whose topic was chosen by the TE, followed by an open feedback session, involving the TE and the other prospective teachers. The class plan for the microteaching was to follow the TAF components, which were adapted to the different skills).

In January, 2015, the LI held a TEP with eighteen participants, and from these one of those who passed the selection and was hired by the LI was selected to participate in this study, due to her willingness to take part in the research, as well as the fact that she was a novice teacher, besides not having had contact with teaching methods previously (this participant will be introduced in the next subsection).

The data for this study come from classes taught for one specific group assigned to the selected teacher along her first teaching semester in the LI. The group had two one-hourtwenty-minute classes per week, and I observed eight of them along four months. As previously mentioned, the classes followed a communicative approach to learning, with emphasis on task-based activities, therefore there was a strong emphasis on oral communication (speaking and listening). Form (grammar) was supposed to be taught inductively, whereby teachers lead students to reason upon and come up with the grammatical rule. The writing part was usually not done in class, but assigned as homework (in the workbook), with students handing in the workbook to the teacher, who corrected students' work at home and returned the workbook in the following class, with corresponding grades and feedback. Besides the books, the LI also had an online component, with tasks that were done both in class (in a computer room, which had five computers with access to the internet), and as homework. The group in which the classes were attended consisted of six 10-12-yearold students, who were at a pre-intermediate to intermediate level (A2-B1, according to the Common European Framework<sup>3</sup>), having studied English from two to five years prior to the research.

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<sup>&</sup>lt;sup>2</sup> Common Reference Levels: Global scale:

A2: Can understand sentences and frequently used expressions related to areas of most immediate relevance (e.g. very basic personal and family information, shopping, local geography, employment). Can communicate in simple and routine tasks requiring a simple and direct exchange of information on familiar and routine matters. Can describe in simple terms aspects of his/her background, immediate environment and matters in areas of immediate Basic need.

B1: Can understand the main points of clear standard input on familiar matters regularly encountered in work, school, leisure, etc. Can deal with most situations likely to arise whilst travelling in an area where the language is spoken. Can produce simple connected text on topics which are familiar or of personal interest. Can

# 3.4.2 Participants

In this study there were two participants: the novice teacher and the teacher educator (also the researcher). In this sub-section, I go about the criteria for the selection of the teacher for this study, and then, a detailed description of both participants is provided.

### 3.4.2.1 Criteria for participant's selection

At the moment when data collection was supposed to take place, the LI where this study was carried out had just finished its teacher selection. Therefore, I talked to the coordinator of the school in order to explain the research focus, and asked her to contact the teachers who did the preservice and had little experience in teaching (from 0 to at most 3 years), and who would be willing to take part in this study. Two candidates accepted to participate, and after interviewing them, I selected Nicole, who had little experience in teaching, had never studied pedagogy or taken any preservice course previous to the TEP, and had just started taking an undergraduate course in teaching English at the Universidade Federal de Santa Catarina (UFSC); the other participant was not selected due to the fact that she was going to teach very young children, thus the guidelines of the TAF were different from the ones I had selected to work with. In the next sub section, there is a detailed description of the selected teacher, followed by a detailed description of the other participant, the teacher educator.

#### 3.4.2.2 The novice teacher

The novice teacher was selected for this study based on three criteria: little experience in teaching, readiness to take part in the research, and types of classes she was

describe experiences and events, dreams, hopes and ambitions and briefly give reasons and explanations for opinions and plans.

(Common European Framework of Reference for Languages: Learning, Teaching, Assessment, p. 24. Available at <a href="https://www.coe.int/t/dg4/linguistic/source/framework\_en.pdf">https://www.coe.int/t/dg4/linguistic/source/framework\_en.pdf</a>)

going to teach. When the study took place, Nicole was twenty-five years old. She was born in Brazil, but lived in the USA for five years and a half, where she went to middle school and high school. In 2012, she had her first teaching experience, as a volunteer English teacher in Nigeria for three months, where she would teach teens and adults in underprivileged communities, however with no pedagogic pre-service or training.

When she came back to Brazil, in 2012, she started college, studying Dentistry. As a way of both keep practicing English and making some money, Nicole started teaching English to her friends and classmates, in a one-to-one class format, but again without having taken any teaching course or training: she chose a coursebook and started following it (without a teacher's guide). After two years, she realized that her experience of teaching private classes was more fulfilling than Dentistry College, and Nicole decided that she wanted to be an English teacher. Hence, she quit Dentistry and started her undergraduate studies in Letras<sup>4</sup> (Language teaching) in March, 2015, at the Federal University of Santa Catarina (UFSC). In order to learn more about teaching and making ends meet, she decided to teach in a language institute, and in the summer of 2015 she took the TEP, starting teaching at the LI right after that (March, 2015). She was given five groups, ranging from children, teenagers and adults, and she taught at varied schedules (morning and evening). During the semester of data collection she also took part in teaching workshops provided by the LI.

#### 3.4.2.3 The teacher educator

Paola started teaching English in 1989, six months after having started her undergraduate course in *Letras*, and having had a pre-service program of about ten hours, in the same Language Institute this study took place. Along her career, she had experience teaching in language schools, regular schools, and in-company private students, with students ranging from children, teenagers and adults. She worked in the LI for twenty five years, both as an English teacher and as academic coordinator. Her position as academic coordinator lasted for the ten last years she worked at the LI, when she also taught some classes. However, when this research was conducted she was not working at the LI anymore, so her role in this study was only as a researcher and teacher educator, not as an academic coordinator of the school.

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<sup>&</sup>lt;sup>4</sup> Letras is an undergraduate course whose goal is to certify Language teachers, either in Portuguese, English or Spanish, that are able to work in schools (from elementary to high school).

As an academic coordinator her job was two-fold: on the one hand, as a manager, attending the LI's bureaucratic processes, like devising the class schedules, preparing school events, dealing with students' and parents' issues, making reports to be sent to the headquarters, among other functions. On the other hand, she was a teacher educator, concerned with pedagogical issues, like conducting the pre-service course (TEP) and selecting teachers, and at an in-service level, observing teachers' classes and giving feedback on them, devising and implementing pedagogical and linguistic developmental outlines for teachers, creating, planning and holding pedagogical workshops, taking part and presenting seminars at local and national seminars. She had usual one-to-one meetings with all the teachers, focusing on their individual matters, as well as group meetings, related to teaching matters.

Paola holds a degree in Letras (Language teaching) from Universidade Federal do Rio Grande do Sul (UFRGS), a post-graduation degree in teaching methodologies from UNINTER, an MA degree in linguistic studies from Universidade Federal de Santa Catarina (UFSC) and is currently a PhD candidate in linguistic studies at UFSC. Her specific post graduate area is teaching, focusing on teacher education. In her resumé there are more than thirty pedagogical workshops and seminars that she attended, as well as several workshops on teaching that she devised and presented. She has also been a presenter in eight regional and national language seminars and congresses.

#### 3.5 DATA COLLECTION

#### 3.5.1 Procedures

The data collection for this study happened along four months, from March to June, 2015. During that time, I attended and filmed eight classes taught by the novice teacher, and subsequently, I gave feedback of them (all the feedback sessions took place the day after the class attendances, within 24 hours), which were also recorded. Swain, Kinnear and Steinman (2010) claim that "Research methods that focus on collecting and conducting *microgenetic* analyses of observations, audio and video recordings of students activities and discussions

offer the most promising way to capture this dynamic process and better inform our teaching/learning decisions" (SWAIN, KINNEAR & STEINMAN, 2010, p. 69).

The classes were taught at the LI, and the feedback sessions (mediating sessions) were held at a post-graduation classroom at UFSC, equipped with a TV and a camera. Ideally, the frequency of classes and mediating sessions was supposed to be twice a month, every fortnight. Sadly, due to personal reasons, Nicole had to leave the LI before finishing the semester (and the end of classes with the group in question), what caused the data collection to be adapted (the last two classes were to be in June, but I had to modify the design, so there were three classes attended in May and only 1 in June. Consequently, the data collection took place as follows: two classes in March, two in April, three in May and one in June of 2015, with subsequent mediating sessions on the following days).

#### 3.6 DATA ANALYSIS

The analysis of the data is of a qualitative nature, taking a *microgenetic* approach. Following, I provide a description of what the mediating sessions were like, and subsequently, a detailed explanation of how the data for this study will be analyzed.

## 3.6.1 Mediating sessions

The mediating sessions (MS) aimed at discussing the pedagogical choices undertaken by the novice teacher along the four months, enabling her and I to exchange views concerning her teaching practices (what pedagogical choices she made during the classes, elicited by the teacher educator), as well as to voice the rationales, feelings, perceptions and doubts underlying her pedagogical actions.

The mediating sessions involved three stages: two pre-phases and the actual session. The first pre-phase consisted of me attending the classes, only as an observer, taking notes of the points I thought about discussing in the mediating session. The second pre-phase involved watching the filmed classes, deciding the aspects I would address in the MS, noting down the exact time each topic took place, as well as relevant questions/points regarding that topic; in this second pre-phase, I also filled in a document called *Class Observation Form* (COF) for each class, specially focusing on the TAF guidelines, (occasionally also on eventual

pedagogical issues that arose in class), besides comparing the classes Nicole taught to the TAFs she had planned. (See COFs in Appendix B).

The third phase, the mediating session itself, was sequenced as follows: first, I asked Nicole about her general impressions of the class under scrutiny, and subsequently, I presented (showing her the filmed classes) the specific moments I had focused on in my analysis, employing several mediational strategies in order to evoke the rationales behind Nicole's attitudes, like asking her what was the goal of a specific moment or pedagogical choice (relating to the task components of the TAF), eliciting what could be other ways of handling a specific point, what was the result of taking that attitude, and so on. In other moments, I provided suggestions or examples of what she could have done, or showed the guidelines in the teacher's book. These strategies will be later specified. Invariably, at the end of the MS, I asked the teacher to provide an account of her views about that specific session.

## 3.6.2 Nature of the analysis and analysis criteria

As stated in the first section of this chapter, this research analysis will be of a qualitative paradigm, following a *microgenetic* approach, as I will focus on the moment-to-moment changes that happened along the mediation sessions, drawing a relationship with my mediation. I will employ interpretive content analysis (DESCOMBRE, 1998), by going over the mediation sessions, trying to find instances of the different mediational strategies used, and if these different strategies provided an impact on how the novice teacher developed the four aforementioned pedagogical concepts.

As far as mediation is concerned, the constructs I will use in the analysis are the two types discussed in section 2.1.1 of the Review of Literature: one of the types by Wertsch (1985), explicit (intentional) mediation, and what I have named intentional implicit mediation (BIEHL, 2016), when the more knowledgeable other intentionally leads the *mediatee* to find out the answers by herself (the novice teacher), by trying to guide her into reflecting about and come up with pedagogical rationales.

After scrutinizing the eight recorded mediation sessions, I came up with eight relevant categories for analysis, organized within a continuum ranging from more implicit to more explicit, which are:

Table 1: Categorization of mediational strategies in terms of implicitness-explicitness.		
Implicit strategies	<b>Indirect Explicit strategies</b>	Explicit strategies
<ul> <li>Eliciting teacher's reasoning;</li> <li>Asking questions to support expert's opinion.</li> </ul>	<ul> <li>Recalling what happened in class;</li> <li>Naming the concept.</li> <li>Reading from the material.</li> </ul>	<ul> <li>Giving examples/suggestions/ saying what should be done;</li> <li>Explaining and/or clarifying the concept;</li> <li>Showing the suggested guidelines on the teacher's guide</li> </ul>

Table 1: Categorization of mediational strategies in terms of implicitness-explicitness.

Source: the author

Apart from explicit-implicit mediation, the strategies applied by the TE will also be categorized in terms of systematicity or randomness of occurrences, meaning (ir)regularity or (lack of) frequency of remarks/references of a given aspect.

Table 2: Categorization of mediational strategies in terms of frequency.

Very frequent	Frequent	Less frequent
Repeatedly employed	Occasionally employed	Rarely employed

Source: the author

## 3.6.3 Analysis procedure

To answer the research questions, which inquire if the mediation configuration provided by the teacher educator has impacted the teacher's development of pedagogical concepts, I used the following procedure:

- i) To answer the first specific RQ, "Which aspects have been approached along the eight mediating sessions", I analyzed the mediating sessions and catalogued which pedagogical concepts, from the guidelines of the LI (The TAF guidelines outlined in 1.3, namely goal, input, grouping, instructions, procedures [presentation, performance and accountability], links, related homework) were tackled in all of them.
- ii) To answer the second RQ, "What mediating strategies are used by the TE to mediate the teacher along the eight mediating sessions?", I watched the mediating sessions, making a chart of the strategies used in each of the teacher's pedagogical aspects (the strategies have been specified in 1.5.2)

In order to answer the third RQ, "Can we draw a relationship between the aspects (categories) developed by the teacher and the strategies used by the TE", I firstly made an interpretative analysis of my interactions with the teacher, classifying these interactions according to implicitness and explicitness, and later I made a chart comparing the strategies I used in the higher and lower instances of development, along with the frequency in which they were employed. In order to answer the second part of the third RQ "If so, what does this configuration look like", as well as the main research question of this study, I attempted to find relations between strategies used and development of concepts, analyzing how the teacher's practice was influenced by the specific strategies I used, joined with how frequently they have been employed. For this intent, I transcribed the excerpts of the mediating sessions in which these issues emerged.

### 3.7 ETHICS REVIEW BOARD

Since this research involved human subjects, an approval from the Ethics Review Board (CEPSH-UFSC) under CAAE number 37092914.3.0000.0118 was granted. See appendix C for consent forms.

### **4 ANALYSIS**

Analyzing the mediational moves I made as I interacted with a novice teacher in a language institute where I was head teacher for about ten years takes a lot of effort in terms of distancing myself from trying to save face or justifying my actions. As already mentioned, the corpus for this dissertation comes from my MA thesis, whose objective was to trace the teacher's development of specific concepts. The idea of going back to the data and focusing on the mediational strategies employed in the interactions came later, when I realized that the quality of my interactions with the teacher might have had a certain impact on how the teacher developed the pedagogical concepts worked on. Therefore, the goal of this analysis is to understand what the different strategies I took look like and to verify if they may have had any impact on the teacher's development. As this idea of self-analysis happened almost three years after the mediation sessions, I do not remember the purpose of the mediational moves I made, therefore, in this analysis I will try to think about reasons why I had made such mediational choices; as a result, the text is filled with hedging and speculation (might/may/perhaps/maybe, and so on).

The analysis of the strategies used follows Wertsch's (1985) strategic mediation model, ranging in terms of explicitness and implicitness (using the idea of intentional implicit mediation brought about in Biehl, 2016), as well as Poehner's (2008) DA model, with a stronger reference to Golombek's (2011) analysis of DA in teacher education, along with the theoretical foundations provided in the Review of Literature section, by Vygotsky and his followers -Lantolf, Thorne, Johnson, Wertsch and Karpov, alongside ideas concerning teacher cognition). As stated in the method session, after scrutinizing the eight mediation sessions, I came up with eight relevant categories for analysis, organized within a continuum ranging from more implicit to more explicit, which are:

Table 3: Categorization of mediational strategies in terms of implicitness-explicitness.

Implicit strategies	<b>Indirect Explicit strategies</b>	Explicit strategies
<ul> <li>Eliciting teacher's reasoning;</li> <li>Asking questions to support expert's opinion.</li> </ul>	<ul> <li>Recalling what happened in class;</li> <li>Naming the concept.</li> <li>Reading from the material.</li> </ul>	<ul> <li>Giving examples/suggestions/ Saying what should have been done;</li> <li>Explaining and/or clarifying the concept;</li> <li>Showing the suggested guidelines on the teacher's guide.</li> </ul>

Source: the author

By implicit strategies I mean the ones that are introduced to promote the teacher's reasoning upon a certain aspect in an indirect way, guiding her to reflect upon the concepts being tackled, as opposed to explicit strategies, in which I directly interfere in the teacher's thinking; on the other hand, indirect explicit strategies refer to ones in which I provoke a memory without further explanation or clarification. The strategies selected are:

# <u>Implicit strategies:</u>

- Eliciting: when I ask the teacher to think about what she did/could have done, trying to provoke her into reasoning and reflection.
- Asking questions to support expert's opinion: when I ask her a question after an
  explanation or clarification, in order to check if she had understood what had just been
  explained.

## Indirect explicit strategies:

- Recalling what happened in class: when I remind the teacher about what had happened in class, both with students and with her.
- Naming the concept: when I say the name of the pedagogical concept without explaining it.
- Reading from the material: when I read what was written in the coursebook or her class plan.

# **Explicit strategies:**

- Giving examples/ suggestions/ Saying what should have been done: when I give her
  examples or suggestions of procedures, as well as saying what she should/could have
  done in the attended classes.
- Explaining and/or clarifying the concept: when I explain or clear up the concept we were working on.
- Showing the suggested guidelines on the teacher's guide: when I read the suggestions provided by the teacher's guide of the LI for the specific attended classes.

Another angle to be analyzed is the systematicity in which the strategies were employed in the mediating sessions. For that intent, I will make a chart of the frequency of the different strategies used in each of the pedagogical aspects tackled in the study, as follows:

Table 4: Categorization of frequency of mediating strategies.

Very frequent	Frequent	Less frequent
Repeatedly employed	Occasionally employed	Rarely employed

Source: the author

Four pedagogical aspects will be analyzed in this study, which presented a different path of development: contextualization, instructions, modeling and links. In a Task Based/Communicative Approach class, the usual order of the steps is: 1. Contextualization; 2. Instructions; 3. Modeling and 4. Links (these concepts will be defined and explained in every subsection). Some concepts emerged earlier in the teacher's learning path (contextualization and links) while others took more time to be learned (instructions and modeling). By this I intend to check if the mediation configuration may have impacted this development, once, as previously discussed in the Review of Literature section, the development of concepts is mediated by objects or others, from an *interpsycological* plane to an *intrapsychological* one, attuned to the *mediatee's* ZPD.

The following codes were used to facilitate the transcription of the extracts:

Table 5: transcription conventions used when transcribing the classes and interactions presented in this study.

Transcription Conventions	
N	Teacher (Nicole)
TE	Teacher Educator
S	Student
Ss	Students
[ ]	Encloses non-verbal and/or paralinguistic information (e.g.
	[laugh]);
Uh-hum	Expression used to show agreement
Hmm	Expression used showing hesitation /pause
()	long hesitation/pause
(!)	Expression of counter-expectation (e.g. surprise, amazement,
	etc.);
Italics	Text in English with a grammar mistake/ use of bad words/ in
	Portuguese
[]	Part subtracted from abstract

Source: the author

In order to facilitate the reading, TE's utterances were written in bold, whereas N's were written in regular font.

#### 4.1 INSTRUCTIONS

The first pedagogical aspect to be analyzed is "instructions", which, as the name suggests, has to do with instructing, or guiding students into developing a certain task or activity. According to Ur (1991), instructions are "the directions that are given to introduce a learning task which entails some measure of independent student activity" (p. 16). The author suggests that teachers think beforehand about the vocabulary to use, as well as ensure that all students are paying attention before giving instructions, which should also be given prior to separating students into groups or handing out materials; she also recommends repeating or paraphrasing, as well as presenting instructions in different modes, making sure they are brief and clear.

In the beginning of the first Mediating Session (MS), a misunderstanding about the concepts of instruction and modeling (giving examples of how to conduct a task- it will be more developed in the next subsection) came up (lines 6-12) as the interaction shows:

## Excerpt 1: MS 1a

- 1 TE: How did you feel yesterday?
- 2 N: Hmm about my... lesson?
- 3 TE: Yeah, in general.
- 4 N: I was happy actually with my... class. I think everything I wanted to do...
- 5 they gave me... I could see that they got what I meant... But I think I wasn't so
- **6** good with instructions...
- 7 TE: Why do you think so?
- 8 N: Because... I don't know, because I feel that since they know so much
- 9 already, I don't need to do so much modeling, but then I just go and give the
- 10 information... I ... think...I mean I know I do some...for example, they had to
- 11 do a menu I gave them a little weird menu before... I know I did that part... I
- 12 just think that I throw the activity to them...
- 13 TE: Uh-huh... do you know the difference between instructions and 14 modeling?
- 15 N: ... Yes... from the... training I think that modeling is for example, you get
- 16 two students, or one, and you do a modeling in front of the class. But I just
- 17 think that with them since they know it, it's kinda weird... I feel like they
- 18 would feel...
- 19 TE: Oh, I see...
- 20 N: With other classes I do, but with them... I feel like I say and they get it. But
- 21 the activity... there was one time that S1, he was supposed to be the principal,
- and then he went like "Ok, I don't really get what I'm supposed to do, and, I
- 23 had to explain to him...
- 24 TE: So... we're going to talk about this, about instructions and modeling,

- 25 but actually, the instructions were clear, but when it got to the point when
- 26 they had to perform, maybe it was not so clear because they didn't know
- 27 exactly how to do it... they knew what to do, right, because you told them
- 28 what to do, but they didn't know exactly sometimes how to do it, and
- 29 then what I could see is that sometimes you have a goal, in your TAF, and
- 30 that goal was not contemplated... but we're going one by one.
- 31 N: Okay.

As depicted, Nicole shows a pseudo concept about instructions, mixing it with modeling when naming, but demonstrating familiarity with the concept when asked to define it. By using at first an intentional implicit mediational strategy (eliciting-lines1, 7 and 13-14), I aimed at identifying to what extent Nicole understood the concept. Her externalization demonstrated that my mediation should be contingent on her apparent mix-up (equating instructions and modeling - lines 5-6 and 8-12), and thus attuned to her ZPD. Externalization, in this case, had mutual benefits: on the one hand, when externalizing, one (re) orients their thinking process, so it may have been in the moment she externalized it that she realized the difference between the two concepts; on the other hand, it was then that I could perceive how to guide my mediation so it would be goal-directed and contingent on her needs. After her initial misunderstanding (mixing the concept of modeling with instructions) to a subsequent apparent understanding of the concept (saying what modeling was), I wanted to ascertain that the difference between the two concepts was clear for her, therefore, I employed an explicit strategy (explaining/clarifying the concept- lines 24-30). After all, as Karpov (2014) posits, scientific concepts should at a first moment be presented by the expert other, with the mediatee then increasingly appropriating the knowledge by using it (joining the scientific concept to spontaneous knowledge), until it becomes internalized, and "turns into an internal mediator of students' thinking and problem solving" (p. 185).

As this was the first encounter Nicole and I were having, apart from having her externalize her understanding of the concept of instructions, I also clearly expressed the definition and characteristics of 'instructions', aiming at legitimizing myself as a teacher educator who understands about ELT, and who has knowledge about the method of the language institute so as to build a feeling of trust between us. Another reason for being explicit might be that I thought that this is what a teacher educator should do (tell the teacher what should be done in class). This was also the moment in which I felt the need to establish an expert situation-definition of the concept of instructions, so that we could share the same definition in upcoming encounters. In the words of Wertsch (1994), "A situation definition is the way in which a setting or context is represented- that is, defined- by those who are

operating in that setting. (p. 8).

Later on in the same MS, since the teacher had problems with students' behavior while giving instructions for a task, I once again focused the mediational interaction on this aspect, so as to provide the novice teacher with sustained mediation that would facilitate her understanding of the concept and thus shape the quality of her instructions.

### Excerpt 2: MS 1b

- TE: About instructions... you said [TE reads from TAF] "I'll explain the
- 2 instructions because these kids understand everything"
- 3 N: Yes... (inaudible)
- 4 TE: So, what do you usually do with kids... because they're usually very
- 5 dynamic... so if you ask them: "So, get together in groups", they will
- 6 stand up, and scream and shout, and then it's gonna take a long time for
- you to control the class again and give the instructions. What's usually
- 8 advisable is tell them what they're going to do first, so "I'm going to give
- 9 you a picture, I don't want you to show the picture to anybody, and I'm
- going to throw some verbs in the air, and I want you to get some".
- 11 N: And I forgot to tell them that they could use other verbs, yes, to help, I had
- in mind to do that, but I forgot...
- 13 TE: You thought but you didn't verbalize... [laughs]
- 14 N: [laughs] And they asked me "Oh, do I need to use it", yeah, it wasn't
- 15 clear...
- 16 TE: So, what's advisable is to explain all the activity before, yes, it can be
- 17 very clear "I'm going to throw some verbs, get as many as you want, but
- 18 you have to use these verbs, and you're going to write a story about it".
- 19 But the objective of the second task was, [TE reads from T's TAF] "to
- 20 raise awareness about bullying, also to practice more third person
- 21 singular"
- N: Uh-huh... can it be both?

As the passage shows, this time the strategies were very explicit (giving examples/suggestions- lines 5 and 8-10- and clearing up the concept- lines 4-8), maybe because I assumed, from what had happened in class, that the teacher did not know the procedure of explaining all the task before grouping students. My goal was to help her for upcoming classes, should this happen again.

Self-analyzing now, I might have been patronizing by not trying to employ implicit strategies, which may have given me more ground to perceive how my mediation could have been more effective. As claimed by Aljaafreh and Lantolf (1994), who developed a regulatory scale during an ESL course for writing class, the mediating moves should ideally move from initial implicit attempts, when the learner's reciprocity is assessed, subsequently becoming more explicit, when there is no resonance from the learner's part, a process of "jointly

working out appropriate mediation (...) a continuous *assessment* of the novice's needs and abilities and the *tailoring* of help to those conditions" (p. 468).

Finally, in the end of the first MS, there was another interaction, where my mediation was again very explicit (explaining /clearing up the concept – 1, 2, and 5 and giving suggestions 3 and 4). This time, I was led to respond to the teacher's question on her TAF, about right or wrong instructions, as shown below:

### Excerpt 4: MS 1d

TE: We're talking here about instructions... so it's advisable that the teacher give instructions orally, written, reading... (1) you put in a TAF:

"Is it wrong that I tell them all the time what to do?" No it's not, there's no right or wrong way of giving instructions, but sometimes they get used to you doing that, and they get lazy (2)...you know, so maybe you say "Please, read here", and they think "I'm not gonna read 'cause she's gonna say anyway... what to do" you know? (3) So, if you vary the way you give instructions, they go "Oh, what do I do? Do I read or not?" (4) Ok, so, varying instructions is very important, it's not right or wrong, it's just for them not to get used to one kind of instruction. (5)

Overall, the strategic configuration of MS1 shifted from a first implicit try, by eliciting from the teacher what she understood from the pedagogical aspect, to explicit, with suggestions of how to work with instructions, attuned to the situation at hand. This protocol (implicitness prior to explicitness) is present in DA studies (ALJAAFREH AND LANTOLF, 1994; POEHNER AND LANTOLF, 2005; POEHNER, 2008; GOLOMBEK, 2011)

This mediation configuration was also present in MS2:

### Excerpt 5: MS 2a

- 1 TE: [TE showed a part of a class in the video] So, here, instead of giving
- 2 the instructions to all the class you decided to go to every chair, yeah...
- 3 what might be a problem about that?
- 4 N: (...) If I have a class with a lot of students...
- 5 TE: So, what do you think you should do?
- 6 N: Hmm...Just point (...) at the book...
- 7 TE: Yes...It's important to keep the book... as you're standing here [TE
- 8 shows the teacher's position in the classroom in the video, in front of the
- 9 class] keep the book like this [TE puts the book in front of her chest,
- 10 showing an open page, pointing at the exercises] so they'll know where you
- 11 are.
- 12 N: Okay! Yes!

Again, after recalling what happened (indirect explicit strategy, lines 1-2), I tried to implicitly elicit from the teacher her reasoning (lines 1-3 and 5), and later explicitly show her how to give instructions more effectively (giving suggestions - lines 7-11). Once more, I thought that this strategy could expand the teacher's repertoire in relation to giving instructions, as an expert's reasoning behind the action was provided to her.

In a second moment in the same MS, I showed in the video students having trouble understanding how to perform a task (they were giving their opinion about a topic, though the teacher wanted them to use specific language items - present continuous), which was commented in the MS:

#### Excerpt 6: MS 2b

- 1 TE: Now he understood [pointing at S1 in the video]. So what do you think
- 2 you could've done to make this process faster, 'cause it was about five to
- 3 ten minutes...
- 4 N: (...) yes, ... but ...
- 5 TE: What you did was really nice, because you asked about other
- 6 examples...7 N: I should've done that before...
- 8 TE: But you didn't expect that yeah... because they were thinking about
- 9 ideas, not linguistically... they were thinking "what am I doing to help the
- 10 environment?"...
- 11 N: But do you think that was the only problem?
- 12 TE: I think so... they thought about the ideas, and not the language... so
- 13 maybe in the instructions, yeah, "Now, pay attention to the language we
- 14 use to talk about things that are happening right now" ... what do the
- 15 instructions say? [pointing at book]
- 16 N: Yeah it doesn't say anything of what I said [teacher reads from book] "In
- 17 which of the statements are kids talking about things that are happening at
- 18 present time"... it's so much easier... I actually (inaudible)
- 19 TE: [laughs] So, reading the instructions this time was easier... and
- 20 another idea might be writing on the board, right? "I am teaching. She is
- 21 writing. We are having English class". By seeing that they might... "Ah...
- 22 ing, ing ing, polluting"

In this excerpt, I tried at first again to elicit from the teacher (lines 1-3), though, by seeing her lost for ideas of what might have caused the problem in class, I continued the mediation explicitly, first attempting to verbalize students' rationale for not having conducted the task effectively (recalling what happened - lines 5-6 and 8-10), then simulating a teacher's response (giving suggestions – lines 13-14), or giving examples of how instructions might take place (lines 20-22), again hoping to help her. Maybe my eagerness to provide answers might have hindered the teacher into engaging in deeper reasoning; yet, overall, according to Golombek (2011), "These voicings of an expert's response served to reorient the teacher-learner to the problem she faced." (p. 133). However, if the teacher will be able to generalize this way of giving instructions to other situations in which there is an opportunity to do so is something that is left to wonder.

The strategies employed in MS 3 followed the same configuration:

#### Excerpt 7: MS 3a

1 TE: [TE showed a part of a class in the video] So, this has to do with giving

- 2 instructions, yeah? I don't know if you remember, I think in the first class
- 3 (MS) we talked about... hum... when grouping students and then giving
- 4 instructions, do you remember that?
- 5 N: hum... maybe... some part of it...
- 6 TE: Yeah... what happened is first you grouped, then you distributed the
- 7 cards, and then you explained.
- 8 N: Oh, ok, it was supposed to be the opposite?
- 9 TE: The grouping was ok, but then they got a little distracted...
- 10 N: Ok!
- 11 TE: And also, you didn't model this [TE and N talk about modeling]
- 12 N: Uh-huh... so this, this was not enough, right, for modeling, like that's not
- 13 model at all?
- 14 TE: That's not modeling, you just gave instructions...maybe getting a
- 15 bigger picture and explaining what to do...
- 16 N: I feel the need of an e-board... in this other school that I teach I have a
- 17 digital board, and that's perfect, because I do the modeling, but I don't have to
- 18 print in paper, I just put it and they get it, it's not so time-consuming...
- 19 TE: Ah, ok, so you can show a big picture... yes... do you see the
- 20 difference between instructions and modeling?
- 21 N: Yes, yes, I do, actually.
- 22 TE: So the modeling would be you getting a picture and saying exactly
- 23 what you expect them to say.
- 24 N: Like an example?
- 25 TE: Yeah, like giving an example.

In the third MS the topic of giving instructions before grouping students emerged again, but this time the teacher, although not having done it in class, remembered the mediation we had engaged previously, showing that the concept, though not internalized, was already within her ZPD. I started by eliciting if the teacher remembered our discussion about the topic giving instructions (lines 2-4), and by her hesitation (line 5) I went on using an indirect explicit strategy (recalling what happened in class- lines 6-7), hoping she would come up with the concept herself, which she did, but still hesitantly (line 8). The other pedagogical aspect that emerged before, modeling, came up again, as they are closely connected, and as she had already mixed them up, so I proceeded by explicitly mediating about that (line 11, see sub section 4.2- Modeling for full mediation on this aspect). As Nicole was still in doubt about the concepts of modeling and instructions, I went on explicitly explaining the concepts again and suggesting (lines 14- 15), which Nicole justified not doing due to lack of technology (lines 16-18). Towards the end of the MS I used an intentional implicit strategy again (asking a questions to support expert's opinion-lines 19-20), in order to check if she understood what I had said, but subsequently, instead of continuing implicitly, asking her what the difference was, I provided an explicit strategy of giving an example (lines 22-23). It seems that I was trying to make her aware of the differences, but underestimating her capacity of self-regulation, which can be noticed by the fact that in the end she herself illustrated what a modeling would be like (line 25).

## Later in the same MS the aspect emerged once more:

## Excerpt 8: MS 3b

- 1 TE: [TE showed a part of a class in the video where the teacher asked
- 2 students to listen repeat the vocabulary of the task they had just finished
- 3 So, this was the end of the task... why did you ask them to read, repeat
- 4 and elicited the vocabulary in the end of the class?
- 5 N: What was the task?
- 6 TE: About weather. They should complete a table. [TE shown the page of
- 7 the book to N
- 8 N: Okay... the thing is it didn't happen the way I expected, because they knew
- 9 it, they knew the *vocab*, they weren't supposed to read it... I think I just
- 10 panicked!
- 11 TE [laughs]
- 12 N: Okay, I was trying to see if there's something they don't know, but they did,
- 13 everything... we were supposed to work a lot more on this, and it didn't go the
- 14 way... from here to the end for it was horrible because of this... I think the
- 15 teacher's book talks about it, that they were supposed to learn this...
- 16 TE: Uh-huh, they were supposed to learn it... but you think they already
- 17 knew...
- 18 N: yes.
- 19 TE: Uh-huh, so that's why...
- 20 N: That's why, to me everything went downfall.
- 21 TE: I see... you were trying to find things for them to do. [smiling]
- 22 N: [laughs] Uh-huh, some information gap.
- 23 TE [reading from teacher's guide] Pick the cards, make sure students
- 24 understand new words related to climate characteristics; you may have to
- 25 explain the difference between hot and warm. [Reading from book]
- 26 "What's the weather like in your city? Use the words in the box to
- 27 complete them". But then when they had finished the activity you asked if
- 28 they had any questions, but they had already done... so it should be the
- 29 other way around...
- 30 N: Hmm... I think I didn't even tell them to look [pointing at book] before
- **31** they...
- 32 TE: you didn't, you just asked them to do... so it should've been the other
- 33 way around, you should've asked them to repeat the words and so on in
- 34 the beginning of the exercise, and explain better... what they should do.
- 35 [TE plays the part of the video where teacher starts the task] So you said,
- 36 "Read the instructions and fill here". And at this time, you should've gone
- 37 over the vocabulary, and pronunciation, and if they had any questions, or
- 38 maybe expand the vocabulary, as you said they are really good, yeah...
- 39 N: That's what I thought about the class, actually, so boring, because they
- 40 knew everything...
- 41 TE: So, this is the preparation of the exercise, knowing the words... first,
- 42 checking, because you asked them to read the instructions... I appreciate
- 43 that you are varying the way of giving instructions, because in the previous
- 44 moments you told them what to do all the time, but now you're asking
- 45 them to read the instructions. But whenever you ask people to read 46 instructions you have to ask them if they understood... what they are
- 47 supposed to do... and then you have the words that are part of the
- 48 exercise, if they don't know the words maybe they'll have difficulty in
- 49 doing it... maybe not for this group, but for others...
- 50 N: Actually, that's what I thought about this activity, there's no need to go over
- 51 the vocabulary...
- 52 TE: Maybe you're overestimating them, yeah...
- 53 N: Yeah... yeah, maybe...

- 54 TE: Or maybe you could've gone over the words in a different way, asked
- 55 them to mimic, yeah, more dynamic. You could've asked one of them to
- 56 come, whispered the word in his ear, he would have to mime, then the
- 57 others would guess, do something different... as they are more advanced...
- 58 so you see the words were a preparation for the exercise, so you should've
- 59 done before, and when they finished the exercise you did it, because you
- 60 thought, "Oh, there'll be time left, what am I gonna do? "Yeah?
- 61 N: Yeah
- 62 TE I can see why you did it...

In the end of MS3 the aspect "instructions" came up once more, focusing on the preparation for the exercise. As previously done, I started by implicitly eliciting the teacher's rationale for class procedures (lines 1-4), however this time it was a genuine question (I did not know why she had done that), and after discovering why (lines 8-10, 2-15), I sympathized with her (lines 16-17, 19, 21, 62), which, self-analyzing seems that I was attempting to create rapport, a bonding trust between us, or, a positive perezhivanie or "the emotional experience" of learning (JONHSON & GOLOMBEK, 2016). Upon her suggestion, I read the teacher's guide, an explicit form of mediation (lines 23-25), and right after, I suggested what she should have done (lines 28-29), repeated the same point again (lines 32-33 and 27-29, 58-59), besides clearing up the concept (lines 41-42), all forms of explicit mediation. In order to have her feel better about her efforts, I acknowledged that Nicole varied instructions (lines 43-45), which indicates that her ZPD was expanding while she was being mediated; yet, I pointed out another aspect that she had missed in class (checking students' understanding when giving instructions- lines 45-46). Upon her argument that this vocabulary was too easy for the group (line 50-51), I employed another explicit strategy (giving suggestions - lines 54-60), because I wanted to have her understand that this was an important part of preparing students for the task.

Before MS 4 took place, I had a meeting with my advisor, in which we discussed the quality of my mediation. I brought up the topic while I was giving her my account of how I felt about the mediational process Nicole and I engaged in, having sensed that sometimes I had been too formulaic, and my advisor suggested being more implicit, aiming at fostering reflection and reasoning, perhaps facilitating the development of the concept being dealt with. Even back in 2015, when I was conducting the data analysis for the Master's thesis, I already had a feeling that my interactions could have been less formulaic. Analyzing the mediational moves for this study now confirmed my initial perceptions, owing to the fact that now my focus is on what I have done in relation to her development.

Taking this into consideration, here's how MS 4 went:

#### Excerpt 9: MS 4

- 1 TE: So, this was about giving instructions, yeah? How was it different
- 2 from the class we did before? How did you give the instructions?
- 3 N: hum... I don't know what I did, but I guess this time I was like... they can do
- 4 it by themselves...
- 5 TE: Uh-huh... so you asked them to read...
- 6 N: Yeah, but now I think I didn't give them enough time... now watching
- 7 it...they were so quick, and then I was like 'Ok, S1, what are you..."
- 8 TE: Ah, ok, to read...
- 9 N: yeah... I didn't give them enough time to look at it and get...
- 10 TE: Do you remember what we talked about in the previous MS?
- 11 N: I'm sorry, I don't... know...
- 12 TE: No problem... because you did that, you asked them to read, and then
- 13 you started the exercise...
- 14 N: Okay...
- 15 TE: What did you do differently this time?
- 16 N: I asked... them... to report...
- 17 TE: Uh-huh, that means checking if they understood the instructions... so
- 18 you checked... because they could've gotten or they couldn't have, and you
- 19 wouldn't know, right? So, this way you'd know that, you made sure they'd
- 20 know what to do.
- 21 N: yeah... and actually she [pointing at a student on TV] didn't get it...so... I
- 22 think that I said it, right?
- 23 TE: Yes.

Accordingly, my mediation this time was mostly implicit, with me eliciting if Nicole had noticed the difference between her earlier attempt to give instructions and in this class (lines 1-2). As I realized her uncertainty by stating that she did not know what she had done (lines 3-4), I recalled what had happened, thus using an indirect explicit strategy (line 5), which provoked an unexpected response (the teacher feeling insecure about what she had done- lines 6-7, 9). Then I tried to bring back our discussion about checking students' understanding of instructions, and shed light to the issue (eliciting, line 10), which also did not ring a bell (line 11). Only by using an indirect explicit strategy (recalling- lines 12-13), and repeating my initial question from the present MS (implicit strategy eliciting - line 15) did she realize the difference (line 16). By naming the concept of instructions again and clearing it up (lines 17-20), I intended to foster its development, joining her spontaneous concept (doing) to its scientific counterpart (naming), which she agreed with. Moreover, she realized that a student had only understood how to do the exercise after she checked instructions (lines 21-22), demonstrating that the concept was making sense to her, perhaps because my mediation was goal-directed and systematic, this may have propelled the teacher's development. This also showed that the situation definition of this concept was being redefined, with an increasing level of intersubjectivity between us: even not being able to name the step "checking instructions" (she referred it as "report"), Nicole already perceived the importance of doing it. As Golombek (2011) explains, intersubjectivity, that is, Nicole's situation definition of the concept, shared aspects of mine (the more expert's point of view). Golombek (2011) goes on claiming that the mediation, on the interpsychological plane (between her and me) may reflect a change in the teacher's intrapsychological functioning, a fact that can be perceived when she showed her understanding of the intention behind the scientific concept presented.

This mediational qualitative change could also be perceived in MS5:

## Excerpt 10: MS 5a

- 1 TE: [after the video of the lesson in which students were confused about
- 2 how to do a task) So, do you think the instructions were clear?
- 3 N: No. because they didn't realize that they didn't even know what is apply...
- 4 to you... and 1...2 people didn't do, right? S1 and... S2...
- 5 TE: [nodding in agreement] Uh-huh... let me show you [TE shows in the
- 6 video the students looking at the teacher and not working, with N saying
- 7 "And then you have to see if this applies to you, ok? Applies to you!] And
- 8 then you kept repeating "applies to you". So, how do you think you could
- 9 have avoided that? Let's go back to the preparation, yeah?
- 10 N: Could I have asked questions about them, you know?
- 11 TE: Hmm... For example? Because it was not clear what they were
- supposed to do, yeah?
- 13 N: Yeah... what's written on the book, actually?
- 14 TE: [showing at the book to N] Applies to you! [laughs]
- 15 N: [laughs] Oh really? OK, never mind!
- 16 TE [reading from book] It's written..."Look at the pictures. Check what
- 17 applies to you and cross out what doesn't".
- 18 N: Okay...
- 19 TE: So, let's review a little the preparation phase: you give the
- 20 instructions... something that applies to you... after the instructions,
- what should have happened?
- 22 N: Modeling?
- 23 TE: Uh-huh. How could you have modelled that?
- N: I'm stuck with modeling! (...) Hum... I think ....the problem is that I don't
- have time to do what I want to do...
- 26 TE: But you do have time!
- N: No, no, I don't mean in class, I mean outside of the class...
- 28 TE: Do you think so?
- 29 N: I think so...
- 30 TE: But you're early, aren't you? There are only two more units to do...
- 31 so I think you have plenty of time!
- 32 N: No, I don't mean like that, I mean I don't have time in my life!
- 33 TE: OH, I see, to prepare well...
- 34 N: To prepare, I always think I could do a nice modeling, like showing an
- as example on a paper or something...
- 36 TE: But you don't have to!
- 37 N: Yeah, I know...
- 38 TE: Like you said the first sentence, yeah? You gave an example [looking
- 39 at the book] you said... for example "my friend and I play outdoors",
- 40 right? And then you elicited the vocabulary, yeah, of this sentence, but
- 41 you didn't say actually what they were supposed to, you just said the
- 42 sentence "for example my friends and I play outdoors"...
- N: Okaay, and then I didn't ...like...if this applies to you...
- 44 TE [interrupting]: "If this is true about me, if I do this, I check, if I don't

- 45 do this, I cross out."
- 46 N: It would be so simple, right?
- 47 TE: Yeah... so you see, you don't have to prepare extra things, extra
- material... you just have to remember that sometimes the instructions in 48
- 49 English -because you give instructions in English - is not very clear for
- **50** them, yeah, because, although they have been studying English for some
- 51 time, they don't know many things, and this word is not so used, right?
- 52 Apply to you...
- 53 N: Yeah... I thought of that, actually in class, who does that?
- 54 TE: Yeah, because your level of English is so high, that you don't have
- 55 difficulties... with the words themselves... but always try to put yourself
- in their shoes and think... "Do they know this word? Is it a common 56
- 57 word"? Maybe they would know, because they're used to doing this kind
- 58 of exercise...
- 59 N: yeah, I don't know...
- 60 TE: OK, so, modeling is showing how to do, and you didn't, you just said
- 61 what the exercise is, but you didn't show them how to do. Last MS we
- talked about exploring the pictures... what else you could have expl... 62
- 63 you should have explored on the page? [showing the book to teacher]
- 64 besides the pictures?
- 65 N: [looking at book] Oh! So many things...
- 66 TE: Besides the pictures.
- N: Oh! The sentences! 67
- TE: The sentences, yeah! Remember we talked about that a little bit? 68
- 69 That the sentences are also part of the visual aid...
- 70 N: But then I think "Oh, it's like I'm doing it with them"... like, I leave them
- 71 with no... gap...
- 72 TE: Oh, no information gap?
- N: I think so, because then I'm reading everything with them and they just go 73
- 74 like check, they don't think...by themselves...
- 75 TE: Okay, okay...
- N: yeah, this time they would go with their partners and talk about it... but 76
- 77 they didn't because I didn't tell them what to do! Like, "me neither" and
- **78** everything else... but... [looking at book] yeah, I think I missed the two sides
- 79 of the city [the picture on the book].
- 80 TE: yeah, you did... so you could've explored the pictures, maybe the
- 81 sentences, not saying what they mean, but relating "Who's playing
- outdoors?", for example, so they really know what "outdoors" mean, 82
- 83 yeah, because sometimes they don't know and they don't care about
- 84 asking, sometimes they do, like "What's the meaning of..."... 85
- N: I think they do because last class we talked about indoor sports...
- 86 TE: Ok, so you knew they knew.
- 87 N: yeah, the other ones maybe they didn't...
- TE: [reading from book] yeah, there's here: "take the bus", ok... 88
- 89 N: Oh, but you see, they didn't know that [N talks about one of the students
- 90 who has low performance, and about his misbehavior]
- 91 TE: [reading from COF] I wrote here, what was the linguistic goal?
- 92 Because if they were doing in pairs, they would have to talk...what was
- 93 the linguistic goal?
- N: There was no goal because I didn't... do it. 94
- 95 TE: So you didn't prepare... you just...
- 96 N: I prepared, I just didn't do it
- 97 TE: [laughs] yeah, I mean, you didn't prepare them to the activity, you
- 98 just had them do it...
- 99 N: yeah, no... I remembered after they had already reported it...
- 100 TE: We're going to see this... [TE shows students working in pairs in the

- 101 video] So here... what was the linguistic goal? See things that they had in
- 102 common but what were they supposed to say?
- 103 N: They were supposed to say... well, to each other? Or...
- 104 TE: To each other.
- 105 N: One of them was supposed to say "I do something" and then the other was
- 106 supposed to say "me too/ me neither". And then in the end, to report, that I
- 107 did, they would say like "Both S1 and I ..."
- 108 TE: But here [pointing at the video] they just compared their crosses and
- 109 checkmarks, and they didn't say anything... or maybe they did, in
- 110 Portuguese, or even "me too", but this was not clear they would have to
- 111 say, it was not modeled, again...
- 112 N: Yeah... I see that...
- 113 TE: You see that? Good!
- 114 N: Yeah, I saw it like, right after it!
- 115 TE: Okay! So good! Because before you didn't even...
- 116 N: Because it was right on my face [pointing at the TAF] and I was like "Oh,
- **117** my God"

In this interaction, both instructions and modeling were tackled, because they were the aspects that hindered students' effective accomplishment of the task. My mediation was most of the time intentional implicit, by eliciting (lines 2, 8-9, 21, 25, 52-64, 92-93, 101-102). At first, even though she recognized the instructions were not clear (lines 3-4), she seemed not to understand why the task had not gone the way it had been supposed to, even with me implicitly trying to bring about her reasoning (lines 19-20). When I realized Nicole had difficulty understanding why that had happened, I resorted to an indirect explicit strategy, recalling what happened (38-42), which apparently triggered her understanding of what had gone wrong (line 43). Right after that, I verbalized what she could have said in class, so students would know what to do (line 44-45). This strategy, giving examples or, as Golombek (2011) puts voicing an expert response, aims at (re)orienting the teacher to the pedagogical aspect under assessment, as well as extending "the teacher's thinking by voicing what she as a teacher might actually say in a situation like this" (p.130). As the MS moved along, I was more explicit, by clearing up the pedagogical aspects, reinforcing the role of instructions and modeling (lines 47-52, 54-58 and 60-62), intending to lower her dissatisfaction towards her conduct in class, attempting to create a positive perezhivanie.

However, another belief emerged ("preparing a modeling takes time"- line 24-25, 27 and 32), which was demystified by me (line 36), with explicit mediation of showing how this aspect could have be done (lines 38-42), which triggered some moments of cognitive-emotional dissonance, with Nicole realizing her mistake, and verbalizing it (line 43), besides acknowledging what she should have done (line 46), which may show that her path to learning the concept was on the way of development, as Golombek (2011) states that "cognitive and emotional dissonance has the potential to initiate teacher development if that

dissonance is somehow mediated" (p. 130). In a nutshell, the explicit mediation was intended to demystify pre-conceptions, clarify shady points, and even show the teacher's potential ways of dealing with the pedagogical aspect. Even though I employed more explicit mediation here, I was more aware of the reasons why explicitness was necessary, showing that my path to self-regulation was also being traced as I engaged in responsive mediation with Nicole.

Later in the same MS, there was another moment in which we approached the aspect:

#### Excerpt 11: MS 5b

- 1 TE: [after showing N giving instructions to an exercise on the video] So,
- 2 this is the instruction for the second exercise. Do you think it was clear?
- 3 What they had to do?
- 4 N: (...) well... based on what I just said?
- 5 TE: Uh-huh.
- 6 N: Can I see it again?
- 7 TE: Sure [TE shows the part again, N giving instructions very clearly]
- 8 Ok, you said that, and then you were again...
- 9 N: interrupted...
- 10 TE: interrupted...I think that is the problem that has been happening...
- 11 because you say something, and it's clear, and then you are interrupted,
- 12 and when you go back to it, things are a little shaky...
- 13 N: yeah, ok... [Seeing the student's interruption on the video] Which means
- he wasn't paying attention to me...
- 15 TE: No, he wasn't... [continued showing the interruption and then the
- 16 instructions being given again]
- 17 N: I thought it was clear until...
- 18 TE: And then S1 said "Ah prof, então a gente tem que colocar no mapa"
- 19 (so, teacher, we have to put it in the map), yeah, so, she clarified it in
- 20 Portuguese.
- 21 N: You know, I didn't hear that...
- 22 TE: yeah?
- N: I think there's too much side talk, I can't even hear... and actually on this
- 24 day there were kids outside, screaming...
- 25 TE: Yeah, terrible... [showing the video] So, now you did, and you're
- 26 checking [students have problems performing the task] You see, they
- 27 didn't know "next to"... so how could you have prepared them?
- 28 N: Hmm... because the words "next to" is only in the audio, right?
- 29 TE: Uh-huh.
- 30 N: It's only shown on the book on the next page... so, if I had said before, it
- 31 would've spoiled it, but I think after... I don't know...I know that what I did,
- 32 after, I know they really got it, but I don't know how I should've done it...
- 33 not to spoil it..
- 34 TE: yeah, so, you have here a map [showing the book] and if you look on
- 35 the other page you see that there are other directions there "across from,
- 36 on...", and the objective of this... one of the linguistic goals is to teach
- 37 directions.
- 38 N: Uh-huh
- 39 TE: So, what you could've done is to explore the map using directions,
- 40 other that, more than, yeah, so across from, next to, on...
- 41 N: Ok, have a teaching moment
- 42 TE: Yeah, yeah... and they would see, they would get the map, because if

- 43 the explore it a little they get more intimate with the map, ok?
- 44 N: yeah, maybe explore it...
- 45 TE: Explore a little bit more, so they would avoid this frustration,
- 46 because it was so easy!
- 47 N: Yeah!
- 48 TE: But in a way they didn't get it!
- 49 N: But then they thought this was a church, [pointing at book] all of them...
- TE: Uh-huh, all of them... and not a museum yeah?
- N: But then S2 said "yeah, the museum was like that..."
- 52 TE: Yeah, because they thought "near" was similar to "next to"...
- N: No, even after, they said, Oh, it's a church" And I said "No, the church is
- here" [pointing at book] But yeah, I should've done that...
- 55 TE: You have to... have very clear in your mind what's the linguistic
- 56 goal of that specific task... yeah, it was a listening exercise, so it was to
- 57 present the...the linguistic goals of the unit.
- 58 N: Uh-huh.
- 59 TE: But then if they don't get it... it's a teaching moment too, right? You
- 60 can also teach, you don't have to wait for them to get everything without
- 61 ... interfering, maybe, yeah? So the next time you teach this book... it's
- always the first time for you right?
- N: Yes! Well, especially with this book...

As in previous interactions, the mediation configuration started out implicitly (lines 1-3), but with the emergence of a new element that may have been jeopardizing Nicole's effective handling of instructions (interruptions- line 9-12), it moved along explicitly. My intention then was to make her aware of this problem (interruptions), hoping that she would try to cope with it should it happen again. In my second intentional implicit mediation (line 25-27), after Nicole's hesitation and apparent lack of knowledge of how to carry on the instructions (lines 28-33), I gave her suggestions, another explicit strategy (lines 34-40), besides explaining why this suggestion would be beneficial to students (lines 42-43). These expert instructional responses (GOLOMBEK, 2011) aimed at fostering pedagogical knowledge of the situation, which she was not yet able to perceive by herself, trying to orient her conceptual thinking, "making the reasoning behind them [expert instructional responses] transparent". (GOLOMBEK, 2011, p.132). Apparently, Nicole was starting to realize the pedagogical implications of some of her actions in class (lines 41, 44, 49 and 54), which indicates that the concept was on the way of development.

What happened in MS6 presented some cognitive changes in the teacher's rationale, as presented below:

### Excerpt 12: MS 6a

- 1 TE: [after showing N giving instructions to an exercise on the video] So,
- 2 this has to do with instructions. Do you think the instructions were clear?
- N: Hmm... not the part of them having to discuss... I thought if they're in
- 4 groups... of course they'd be together, but ...they didn't have that part
- 5 TE: Uh-huh...
- 6 N: You see, because there were three (students), and each one got one (piece of
- 7 paper), and then...

- 8 TE: They thought they would do... individually
- 9 N: Maybe if it were four things, they'd get it, like working together, but they
- 10 didn't.
- 11 TE: They thought everybody would get one, and write their opinion...
- 12 N: Yeah, this group [pointing at video] didn't get it, the other group...
- 13 TE: they started talking...
- 14 N: Started talking... so...
- 15 TE: But this has to do with instructions...
- 16 N: Yeah...
- 17 TE: So, we have been talking about instructions ... you just gave the
- 18 papers, and you said "read the instructions on the envelope"
- 19 N: yeah, but the instructions were from the book... but on the book I think it's
- 20 individually...
- 21 TE: No... I ... I don't know...
- 22 N: I think so... sooo... that was the problem, I got the instructions from a task
- 23 that was different before...
- 24 TE: Ok... I have here... the book, here "Read the statements about
- 25 internet safety, do you agree or disagree?" Yeah... it's not "talk to your
- 26 friends"
- 27 N: Yeah.
- 28 TE: Ok... that was the mix-up... so, it has to do with preparation...
- 29 instructions and preparation. What should you have done? Before giving
- 30 out the papers...
- 31 N: I think I should've just ... changed... the instructions... the written
- 32 instructions... and... because they would get it... if it was well...
- 33 TE: Ok! So "discuss with your partners if you all agree or disagree"
- **34** N: yeah
- 35 TE: But you would have kept the instructions written?
- 36 N: yeah, I wanted to!
- 37 TE: For them to have a different kind of... experience with instructions...
- 38 N: Exactly!
- 39 TE: Because this group [pointing at video] didn't know how to do, and
- 40 then you had to go to them, right... of course this is... one way would be
- 41 you "Ok, I'm going to give you an envelope with papers inside, I want you
- 42 to get the papers and discuss with your friends what you think about it",
- 43 it'd be easier...
- 44 N: But sometimes I get so tired...
- 45 TE: Yeah, that'd be easier, but you wanted to do something different, that
- 46 was your goal...
- 47 N: yeah...
- 48 TE: Okay! [thumbs up gesture] it's just... yeah, you had to change what
- 49 was written...
- **50** N: Uh-huh.
- 51 TE: But it was nice... although they didn't know what to do... so the
- 52 instructions were not clear... the written instructions were not clear.

In this interaction we can perceive a cognitive change in the way the teacher justifies and reasons upon what had happened in class: in previous MSs she was hesitant and even at a loss for words/reasons to explain why she had acted the way she did. In MS6 she was aware of what the problem was (lines 19-20 and 22-23), and, when elicited (lines 29-30), she could verbalize how she could have acted differently (lines 31-32), and she even stood her ground

when confronted about the possibility of giving instructions orally (line 36). Instead of keeping implicit, I slid to explicitness, explaining the concept (why keeping the instructions written, line 37, perhaps preventing her from elaborating on her justification why she wanted to keep the instructions written, thus missing a chance of providing a more responsive mediation. As Nicole, my path towards the development of responsive mediation was twisting, as I moved forward to the formulaic pattern present in previous MSs. Anyway, we can perceive here a move from her situation-definition, with Nicole's effort to understand the concept (varying instructional modes), which I had signaled in earlier MSs. The teacher's verbalizations and perceptions of the problem in the situation presented, as well as her own resolution of the issue, demonstrated teacher learning and development. The mediation, although not perfect (due to my provision of explicit clarifying the concept instead of trying to elicit), still gave an opportunity for the teacher to externalize her understanding of the issue, opening a shared communicative space, or according to Mercer (2002), an intermental development zone, which is "a continuing event of contextualized joint activity, whose quality is dependent on the existing knowledge, capabilities and motivations of both the learner and the teacher." (MERCER, 2002, p. 141)

In terms of rapport, my mediation here was both intentional implicit, by eliciting (lines 2, 29-30, 35), and when I saw that she gave justifications to her actions, I suggested what she could have said, or "voiced an expert's response" (lines 33, 41-42), which was explicit, but aiming at reiterating her point. My evaluative comment on line 51 ("it was nice"), as well as my positive reinforcements about her rationale (lines 37, 45-46 and 48) aimed at creating a positive *perezhivanie* for Nicole, besides showing that these attempts to vary instructional modes were appreciated, fostering her development towards coming up with different strategies in class.

Later in the same MS there was another moment in which the concept was commented on:

## Excerpt 13: MS 6b

- 1 TE: [after showing N giving instructions to an exercise on the video] So, here
- 2 you had the instructions for that exercise... do you think the instructions
- 3 were clear?
- 4 N: (...)Yeah!
- 5 TE: Yes, yes! So, you see the difference?
- 6 N: Uh-huh
- 7 TE: You told them exactly what they should do, you wrote the word on the
- 8 board "tips", so they'd know "What am I... oh, tips! ah, ok", it's there, it's
- 9 written, ok... so, this was very well executed! They knew what to do, they
- 10 saw how many tips they should write, they knew that they had to talk in
- l pairs

#### 12 N: Thanks!

The cognitive change already perceived about giving instructions was this time present and acknowledged by me, starting implicitly to bring about her rationale in reflecting upon her practice (eliciting lines 2- from" do" to 3), and finishing explicitly (indirect explicitly recalling, lines7- up to "tips" and clearing up the concept lines 8 –from "what" to 11) in order to reiterate what were the characteristics that made this example of instructions effective. Looking back now, I guess I could have elicited why they were effective, but I may have been so happy with her accomplishment that I wanted to comment on it. However, it can also be interpreted as a way to reassure the teacher that what she did was on the right track by naming what she had done correctly. Once again my development towards responsive mediation showed signs of movement backwards, missing chances of implicitness. Anyhow, we can see that her ZPD had already expanded since the beginning of our interactions, our intersubjectivity level continuously increased and that the emergent, dynamic, contingent, goal-directed responsive mediation we engaged in was paying off.

In MS8, when asked about her general impressions of the class she taught, the interaction went like this:

#### Excerpt 14: MS 8a

- 1 N: I think... I got the instructions a little bit better... they got what they were
- 2 supposed to do...
- 3 TE: Uh-huh... Why do you think so? What did you change this time?
- 4 N: (...) I explained every little detail, I think.
- 5 TE: Uh-huh.

Later in the same session I had planned to talk about the aspect, and the interaction was the following:

#### Excerpt 15: MS 8b

- 1 TE: [after showing the video with N giving instructions to students] Do
- 2 you think you gave the instructions... you led the instructions differently
- 3 this time?
- 4 N: Yeahhhhh
- 5 TE [laughs] Yeahhh. How different was it? And why did you do it?
- 6 N: Okay. I tried to get a different example... from the book...
- 7 TE: This is modeling, a little later... I'm talking about giving the
- 8 instructions, telling them what to do...what did you do differently this
- 9 time? That you used to do differently, and then we have been talking
- 10 about it...
- 11 N: okay... I only separated them into groups after... the instructions... I don't
- 12 know I basically said everything...
- 13 TE: You said everything before... giving the cards

- 14 N: Oh, yeah!
- 15 TE: remember what had happened in the classes, that we talked about,
- 16 before?
- 17 N: yeah, I gave them everything, I changed the setting, and then I gave
- 18 instructions.
- 19 TE: Which do you think works better, in your opinion?
- 20 N: Oh, this one!
- 21 TE: Why?
- 22 N: Because they're quiet! [laughs]so, they pay attention!
- 23 TE: Exactly! Before moving, before getting up, before getting cards,
- 24 getting excited... so, do you feel the need to do this?
- 25 N: yes! Oh, yeah, I see!
- 26 TE So, it makes sense to you.
- 27 N: Uh-huh!

This interaction shows that Nicole's concept of giving instructions had ripened, her ZPD had expanded, the spontaneous concept met the scientific one, she could perform the instructions as discussed in the MSs, and this time only with my intentional implicit mediation (eliciting- excerpt 14, line 3; excerpt 15, lines 1-3, 5, 8-9, 15-16, 19 and 21 and asking question to support expert's opinion, line 24) she was able to verbalize what she did and the reasons why doing it (excerpt 14, line 4 and excerpt 15, lines 4, 6, 11-12, 17-18 and 22). When compared to the first meetings, there was a clear redefinition of the situationdefinition regarding the order of instructions (lines 11-12 and 17-18), signaling that our level of intersubjectivity increased because we shared some aspects of the concept under development. As Wertsch (1994) explains, "I would argue that this process of giving up an existing situation definition in favor of a qualitatively new one is characteristic of the major changes that a child undergoes in the zone of proximal development" (p.11). Likewise, Nicole's ZPD expansion signaled that the concept was on the way to internalization (we cannot affirm that the concept was developed or internalized due to the fact that this was our last encounter, and there would be the need of systematic perception of her practice concerning this aspect).

Analyzing the systematicity of the aspect instructions, I was able to categorize the following frequency of the employment of the mediational strategies:

Table 6: Frequency of strategies employed in the pedagogical aspect Instructions. \* (number of occurrences/total number of interactions)

More frequent	Frequent	Less frequente
Repeatedly employed	Occasionally employed	Rarely employed
<ul> <li>Recalling (36/130) *</li> <li>Eliciting (29/130)</li> <li>Explaining/ clarifying</li> </ul>	• Giving examples/ suggestions/ saying what should have been done	<ul> <li>Reading from the material (8/130)</li> <li>Asking question to</li> </ul>

the concept (25/130)	(13/130) • Naming (12/130)	support expert's opinion (6/130)
		• Reading from the Teacher's guide (1/130)

Source: the author

The strategic mediation configuration of the pedagogical aspect instructions was, overall, from more explicit, formulaic, formula-driven in the first MSs, to more implicit, aiming at eliciting the teacher's reasoning and thinking processes in later MSs, attempting to verify the concept being developed as her ZPD expanded. As regards the systematicity of the strategies, there was a slight higher number of explicit strategies (30% of times), as opposed to implicit (26.9% of times), whereas indirect explicit strategies were the most recurrent (43.1% of times). Individually, the most used strategy was *recalling what happened in class* (27.6%) followed by *eliciting* (22.3%), and *explaining/clarifying the concept* (19.2%). The overall result of using explicitness over implicitness demonstrates the need to have the concept more clearly explained before it could have been understood. Overall, the data frequency reflects a balance in terms of explicitness/ implicitness, as the literature suggests (WERTSCH, 1985; GOLOMBEK, 2011), both play a different but crucial role in developing concepts, which may be dependent on the ZPD level of the *mediatee*, aligned with the complexity of the concept under development.

The redefinition of situation-definitions along the way (moments in which Nicole showed more understanding of the concept.) helped me to perceive that my mediation could move from more explicit to more implicit, as she started to appropriate an understanding of the concept. When we were able to transcend the dissonance of appropriate ways to give instructions, and her thought got unified with mine, it was a trace that the mental-personal sphere had been changed, signaling that she had established a new relation to what had been presented to her, showing an increase in our intersubjectivity level. However, there were moments in which my development towards responsive mediation went backwards, showing the twisting path I was also engaging in as a teacher educator.

The following aspect to be analyzed is the one that was already commented on, but in the next subsection will be fully developed: modeling.

### 4.2 MODELING

Modeling (ALLWRIGHT, 1976) is a term used referring to a step in the preparation phase of Communicative Language Teaching (CLT), where students are instructed on how to conduct an activity. There are varied ways to conduct modeling, however, typically the teacher may give oral examples (initiated by them and interacting with students), conduct open-pair dialogues (controlled paired dialogues conducted by the teacher and performed by two students), in order for the whole class to have an example of how to perform a task; the teacher may also model in written form, (using the board, posters, cards or slips). Modeling is important in preparing students, because it: i) provides students with the structural linguistic aspect of the task (vocabulary, intonation, pronunciation, and grammar); and ii) makes students aware of what is expected from them in the activity they will perform individually/ in pairs/groups. The teacher's role is of a conductor who sets the examples of what should be worked with, manages the open pair dialogues, asks students to repeat the linguistic aspects worked with (if necessary), so that students have very clearly defined how they have to practice them and do them effectively (POLIFEMI, 2009). Regardless of the skill used (oral or written), it is essential that students know how to perform the activity.

As in instructions, modeling was tackled in all MSs. In MS1, as Excerpt 1 showed, there was a mix-up between instructions and modeling. I will show below only the relevant interactions for this discussion.

#### Excerpt 16: MS 1a

- (...) But I think I wasn't so good with instructions...
- TE: Why do you think so? 2
- N: Because... I don't know, because I feel that since they know so much 3
- already, I don't need to do so much modeling, but then I just go and give the. 4
- 5 Information (...) I just think that I throw the activity to them...
- TE: Uh-huh... do you know the difference between instructions and 6 7 modeling?
- 8 N: ... Yes... from the... training I think that modeling is for example, you get two students, or one, and you do a modeling in front of the class. But I just
- 10 think that with them since they know it, it's kinda weird... I feel like they
- would feel... 11
- 12 TE: Oh, I see...
- 13 N: With other classes I do, but with them... I feel like I say and they get 14
- 15 TE: So... we're going to talk about this, about instructions and modeling,
- but actually, the instructions were clear, but when it got to the point 16 when they had to perform, maybe it was not so clear because they didn't 17
- know exactly how to do it... they knew what to do, right, because you 18
- told them what to do, but they didn't know exactly sometimes how to 19
- 20 do it, and then what I could see is that sometimes you have a goal, in your
- TAF, and that goal was not contemplated... but we're going one by one. 21
- 22 N: Okay.

As previously commented in the instructions section, the teacher's apparent mix-up in naming (lines 1 and 3-5), but seeming to know what modeling was (lines 8-11) was the starting point for me to realize that Nicole needed clearance regarding this pedagogical aspect. Therefore, after an initial implicit mediation (lines 2 and 6-7), I went on paving the way for introducing the topic by naming the concepts (lines 15-22), aiming at establishing the situation-definition of the concept *modeling*. Right at the beginning of our interaction, one of the beliefs she had regarding modeling emerged: "good" students don't need modeling (lines 3-4; 9-10 and 13-14). According to Johnson (1999) "our beliefs shape our representation of reality and guide our thoughts and our behaviors" (p. 30). By that rationale, it is licit to say that she needed goal-directed and systematic mediation so as to allow her to move beyond her belief.

Later in the same MS the aspect emerged again (it is a continuation of excerpt 2):

#### Excerpt 17: MS 1b

- 1 TE: (...) But the objective of the second task was, [TE reads from T's
- 2 TAF "to raise awareness about bullying, also to practice third person
- 3 singular"
- 4 N: Uh-huh... can it be both?
- 5 TE: Sure, no problem. So, the story should contemplate third person
- 6 singular, but they used the past, they used other things, yeah.
- 7 N: I think one of them did it, I think S1, and... yeah, what should I have done?
- 8 TE: [laughs] That was my question! So, in the *Preparation* you have: the
- 9 warm-up; when you are between tasks, the *link* is the warm-up; so the
- 10 warm-up is in the first task of the day, yeah, you warm up not to say
- 11 "Let's take a look at the book", then you have the task, then you have the 12 accountability, then you link, from the accountability... [ TE talks about
- 13 accountability So, the link would be, because the second task would be
- this writing activity, so the link would be, the accountability moment of the
- 15 bullying to the writing [...] And then, you're going to explain all the
- 16 activity before, yeah? OK, you want them to use third person singular,
- 17 then you model, yeah... so you have: link, or warm-up, the first step, then
- 18 modeling.
- 19 N: Could I have modelled that on the board?
- 20 TE: Of course!
- 21 N: I don't know why I thought that it wasn't good...
- 22 TE: No, you could... or you could've made a poster, to save time...veah,
- 23 you could've put a picture, a bigger picture and written something, and
- 24 then you would call attention, "See, guys, Joãozinho goes to school every
- 25 day but his friends hate him... he doesn't like his friends. So, I'm using
- 26 here goes, doesn't like..." Then your goal would be fulfilled, because your
- 27 goal was to develop, to practice third person singular... but if you don't
- 28 model that, they will do whatever they want in their writing, yeah... do
- 29 you see the importance?
- 30 N: Yeah!
- 31 TE: So, the modeling is this, is the second moment, yeah, first link, then
- 32 modeling
- 33 N: Actually I had no modeling for this, yes?

- 34 TE: No, you didn't...
- 35 N: Horrible!
- 36 TE: No, it was not horrible!
- 37 N: Because I didn't achieve my goal...
- 38 TE: Yeah... your linguistic goal... because, of course, there are
- 39 educational goals, when you talk about kids, yeah, learning to respect each
- 40 other, talking about bullying is an educational goal, there's awareness
- 41 raising goal, but there is the linguistic goal, after all, it's a language school,
- 42 right? So, the objective is to develop language, right? So, the linguistic goal
- 43 was not fulfilled because... maybe it was, but maybe not... because it was
- 44 not clear what they should do...
- 45 N: Yeah, it was not for S1... when he asked how to write "once upon a time" I
- 46 went like "s..., he's gonna do it in the past!", because that's the only thing he
- 47 knows so far, of course it's more comfortable, and I didn't do modeling, so...
- 48 TE: So, you see the importance of modeling?
- **49** N: Uh-huh!
- 50 TE: It doesn't have to be... because if you talk about modeling when you
- 51 talk about oral tasks, of course, you get one pair "Ok, so we're going to
- 52 ask each other what we did on the weekend. What is the question,
- 53 remember? What did you do on the weekend?" OK, write on the board,
- 54 etc. Then you ask: "João, can you ask Maria?" Then "What did you do on
- 55 the weekend?" Open Pair. Then: "I went to ..." or "I go to ...", then you
- 56 correct. The modeling is the chance for the teacher to see if what was
- 57 taught before is ok, if not, that's the moment of correction, because when
- 58 they go to *Performance*, when they are doing pair work or group work you
- 58 they go to *Performance*, when they are doing pair work or group work you
- 59 shouldn't interrupt, right? You should let them perform the activity. So,
- 60 the modeling is very, very important, I would say the *Preparation* is the
- 61 most important part of the class, because if the preparation is not done 62 well, then the rest is bad, the performing is gonna be cracked and the
- well, then the rest is bad, the performing is gonna be cracked and the accountability's gonna be bad, right? So, the modeling is this... as the
- 64 modeling here is for a written exercise... you should have written! I think
- 65 writing on the board a story, it would be too long, but if you write
- 66 sentences "This girl eats a lot of junk food" ok, then make them pay
- 67 attention (...), maybe underline, so "Guys, you should follow this,
- 68 remember, talking about another person right?". So it would be clear.
- 69 N: [Nodding in agreement] Okay.

Although Nicole had verbalized in our first interaction that she believed that for those students modeling was not necessary "as they knew so much", it was in MS1b that she came to the realization that, even having a good command of L2, if the task is not well explained and modeled, students may not achieve the linguistic goals of the task. This realization was guided by my explicit mediation (explaining and/or clarifying the concept, lines 16-18, 27-28, 43-44, 50-51, 56-57 and 63-64; saying what could have been done, lines 22-26, 51-56 and 64-68). The reason for being explicit in this very first moment was that, as it was our first MS, I was not sure yet how much theory she had had in the pre-service (as I had not been the teacher educator who conducted it), therefore I wanted to ascertain that what I believed were the appropriate tenets of modeling were going to be shared by us (aiming at interthinking). In lines 31-32, when naming the concept and saying that she did not perform it in class, Nicole demonstrated moment of a cognitive/emotional dissonance (lines 33, 35 and 37), having realized the lack of performance of modeling, showing that, even at the beginning

of our interactions, my mediation was goal-directed towards a growth points. However, there were also few instances of implicitness (asking questions to support expert's opinion, lines 28- from "do" to 29 and 48), with the intention of checking if what I was saying made sense to Nicole, trying to present an expert-like situation-definition of the concept.

In the second MS the topic modeling was brought up again, when some students failed to ask a question in the present simple using "Do you...":

# Excerpt 18: MS 2

- 1 TE: So, what kind of task was this?
- 2 N: Hum...what do you mean?
- 3 TE: In the preservice you had 4 kinds of tasks: Listening, Writing,
- 4 Reading and Oral skills.
- 5 N: Oral skills?
- 6 TE: Oral skills, yeah it's a moment they'll interact by talking to each
- 7 other... so you have to contextualize, yeah, you did, by linking you
- 8 contextualized, but between the contextualization and the doing you need
- 9 to do something for oral tasks...
- 10 N: Modeling?
- 11 TE: Modeling, yes!
- 12 N: I know...
- 13 TE: How do you think you could've modeled, because you went from
- 14 instructions to the doing, the performing...
- 15 N: Yeah, I think at the time I thought "Oh, my God, if I model this again,
- 16 they're gonna kill me, because I kept asking them questions the whole
- 17 class...and because in the last unit we've seen things with usually, sometimes,
- 18 never... so I just let them do it.
- 19 TE: Ah, ok. So, maybe recalling "Do you remember how to ask
- 20 questions?" Ah, "You go ..." "Now, remember that before 'you' you have
- 21 to use something", yeah, just to make sure that they won't have problems
- 22 in the performing... I know this is very easy for this level, but even so...
- 23 N: Yeah, I should do it.
- 24 TE: And I think S1 had a problem, he asked "You..." [TE shows a part in
- 25 the class when student asked "You go to school by bus| He asked "You",
- 26 "You get up... go to school by bus", he asked "you", instead of saying "Do
- 27 you"...
- 28 N: Ahhhh, ok!
- 29 TE: In communication, no problem, but the goal of the task is to ask "Do
- 30 you", right? So, he asked "you", because again, remember we talked about
- 31 last class (MS), they knew what to do, but they didn't know... they didn't
- 32 know they had to pay attention to "Do you", because it wasn't asked.
- 33 N: Can I model that on the board?
- 34 TE: Sure! No problem!

The mediation this time started implicitly (eliciting- lines 1 and 8-9), intending to check how much from our last interaction was attuned to Nicole's ZPD, which was positively confirmed by her response to my elicitation (line 10) at least in naming, a sign that our intersubjectivity level was increasing. Upon my third eliciting (lines 13-14), her belief that "good students don't need modeling" emerged again, this time implied in her explanation that

she had practiced that language item many times before with the students, so they did not need to be modeled (lines 15-18), even showing a certain fear of having modeling with them, explicit in the sentence: "If I model this again, they're gonna kill me", lines 15-16). Then I proceeded explicitly, by giving examples (lines 19-21) and clarifying the concept (lines 21-22). Even though she verbalized she should do modeling (line 23), Nicole only perceived its importance (line 28) when I showed her a student making a mistake on the video, recalling what happened (lines 24-27), which then led me to explicitly clarify the concept (lines 30-32), prompting her to ask me the exact same question (line 33) she had in the previous MS (excerpt 17, line 19), indicating that the path to internalization requires sustained, prolonged and goal directed mediation, especially as far as beliefs are concerned, as people tend to set up explanations for their formed beliefs, irrespective of their accuracy or legitimacy (PAJARES, 1992).

In MS3, this aspect emerged again:

## Excerpt 19: MS 3a

- 1 TE: And also, you didn't model this... I know it's easy, but you should've
- 2 modelled, right? You could've gotten a card, and done yourself one... so
- 3 they would see the example, you know? ... of how to do it...
- 4 N: No, you know, I actually think of this, you know, I could do this, I could do
- 5 that, it's just that it's ... it's really time consuming, sometimes I think about it,
- 6 because I have University, and when I go to prepare... it doesn't, I know it's
- 7 not so good, but it actually takes me time [laughs]
- 8 TE: I know, I know that, I know you make a lot of effort, and I appreciate
- 9 that!
- 10 N: No, but it's not only for this class, you know, for all of them...
- 11 TE: And do you make the TAFs for all the classes?
- 12 N: Yeah.
- 13 TE: The TAFs, like this [showing the TAFs Nicole had made] or...
- 14 N: Oh, no! But I think through all, all my classes... I thought of it, but then I
- 15 thought "Oh, no, I don't have time, I'm just gonna model on the board.
- 16 TE: Okay! That was going to be my next comment, in the last meeting we
- 17 talked about the need of using visual aids, and I saw that you're really
- 18 evolving in that, you are writing things on the board, words, instructions,
- 19 so the ones (students) that rely on visual can be contemplated.
- 20 N: Uh-huh... so this, this was not enough, right, for modeling, like that's not
- 21 model at all?
- 22 TE: That's not modeling, you just gave instructions...maybe getting a
- 23 bigger picture and explaining what to do...
- 24 N: I feel the need of an e-board... in this other school that I teach I have a
- 25 digital board, and that's perfect, because I do the modeling, but I don't have to
- 26 print in paper, I just put it and they get it, it's not so time-consuming...
- 27 TE: Ah, ok, so you can show a big picture... yes... do you see the
- 28 difference between instructions and modeling?
- 29 N: Yes, yes, I do, actually.
- 30 TE: So the modeling would be you getting a picture and saying exactly
- 31 what you expect them to say.
- 32 N: Like an example?
- 33 TE: Yeah, like giving an example.

This excerpt shows a part of Excerpt 7 regarding modeling, which had not been exposed then. I started talking about this aspect explicitly, saying that the teacher had not done it, and suggesting how to do it (lines 1-3). Nicole acknowledged that, but justified with lack of time (lines 14-17), showing another belief concerning modeling: it's "timeconsuming". Instead of trying to demystify it, I agreed with her and showed appreciation for her effort (lines 8-9), which might not have been the best course of action, because instead of confronting her belief, bringing it to the surface to be discussed and understood, enabling the growth point to emerge, I let the moment go by, especially when she talked about modeling on the board (line 15). By not addressing the belief, I failed to deal with it at a conscious level, in order to "break the cycle of perpetuation of models" (ABRAHÃO, 2002, p. 61). Looking back now, I may have done it to create a feeling of trust between us, also clear by my comments in lines 16-19, where I showed appreciation by her actions regarding the use of visual aids. As Johnson and Golombek (2016) claim, due to the fact that learning to teach is filled with an emotional charge, there is the need for teachers to trust the teacher educators that guide them, similarly to when Karpov (2014) says that a child must "accept a caregiver as a mediator who will create the kind of supportive environment necessary for development". (p.38)

By her uncertainty concerning having modelled or not (lines 20-21), I then decided to continue explicitly, telling her she had not done it and giving suggestions (lines 22-23), which she justified by lack of technology (lines 24-26), another belief that I had not confronted again, but acknowledged it (line 27). I then finished the interaction using an implicit strategy (asking a question to support expert's opinion, lines 27- from "do" to 28), but, as analyzed in Excerpt 7, I missed the chance to go on implicitly, and instead I provided an explicit strategy (giving an example - lines 30-31), underestimating her ability to self-regulate. Had I been less explicit, and given her the chance to externalize her emerging understanding of the concept, I might have been more goal-directed, focusing my mediation on the difficulties or pseudoconcepts Nicole might have been having at that time. As Johnson claims, the learning of L2 teaching should be viewed as "a dialogic process of co-constructing knowledge that is situated in and emerges out of participation in particular sociocultural practices and contexts" (JOHNSON, 2015, p. 516). The pedagogical knowledge, which may emerge out of participation in social interactions with me or her peers (interpsychological)

will hopefully become internalized psychological tools for teacher thinking (intrapsychological).

In class 4, students got confused about doing a vocabulary exercise (classifying words related to entertainment under the appropriate categories i.e. movies, music, TV programs, etc.). This was approached in the MS:

### Excerpt 20: MS 5a

- 1 TE: [After showing this part on the video where a student is allocating a
- 2 word under a wrong category] So, he thought that thillers could be for TV
- 3 too... because he watches thrillers on TV!
- 4 N: Uh-huh... because he didn't get "TV programs"...
- 5 TE: Yes... so what was missing here? [showing the exercise page on the book].
- 7 N: Hmm. .. contextualization, and...
- 8 TE: You told them the instructions "You're going to separate the
- 9 words"...
- 10 N: Uh-huh... I, yeah... I overestimated them... again... TV programs... but
- 11 Oh, my God, in Portuguese it's the same word!
- 12 TE: I know... but then, also, they said examples, right? For example, they
- 13 said "Faustão"... and actually here you mean kinds of TV programs, isn't
- 14 it? The book doesn't give examples of TV programs... it doesn't say names
- 15 of films, it says kinds of films... so, this... they didn't get that...
- 16 N: Did they actually say things like "Faustão"?
- 17 TE: They did, when they gave their own examples they said something like
- 18 "Peppa Pig", It's the name of a program, right? So what was missing here
- 19 was deciding exactly what to do, and in this case, something is necessary...
- 20 N: Hmm, yeah, there should be... I should've explored more the... [pointing at
- **21** book]
- 22 TE: The vocabulary?
- 23 N: Yeah!
- 24 TE: I don't know... because this was the aim of the exercise... but here
- 25 you could have... [pointing at the book] done one with them... what would
- 26 this be? If you had done one with them?
- 27 N: A modeling?
- 28 TE: Yes, that'd be the modeling... so you see, there is a modeling not only
- 29 for oral tasks, you can have a modeling like this too...
- **30** N: Okay.
- 31 TE: Yeah?

As previously mentioned in the Instructions section, before MS 4 I had had a talk with my advisor about the quality of my mediation, and in this exchange the difference is evident: it varied from indirect explicit (recalling what had happened in class, lines 2-3, 8-9 12-13, 17-18), and intentional implicit (eliciting, lines 5, 25-26), intertwined with some instances of explicitness where I felt clarification was needed (lines 14-15, 18-19, 24, 28-29). By moving away from explicitness, I was trying to activate Nicole's rationale, inviting her to be more reflective, thus trying to expand her ZPD and her reasoning, which can be perceived in line 10, when Nicole verbalizes she "overestimated students again", showing that she was able to recognize this issue, cognitive emotional dissonance paving the way to a growth point,

with her belief being confronted with the results she was getting from her practice, triggered by the mediation of an expert other. Her correct answer in line 27, when implicitly mediated, shows that, the situation-definition concerning modeling was being redefined, our intersubjectivity level getting increasingly close. This is an indication of my own development towards developing the concept "responsive mediation", being more aware of the impact of implicit and explicit mediation, which before had been conducted more like a spontaneous concept (I did it because I perceived it had worked before as a teacher educator), and now, linking it to the scientific concept (the theory about types of mediation). However, at the time of data collection I still didn't have all the knowledge I have now about the strategies I employed, so I can say that now my path towards the concept has developed even further.

In class 5, as already explored in Excerpt 10, students had difficulty doing an activity, which was explored in the MS: (for full script, please refer to Excerpt 10; (...) refers to parts of the conversation that were omitted)

### Excerpt 21: MS 5a

- 1 So, how do you think you could have avoided that? Let's go back to the
- 2 preparation, yeah?
- 3 N: Could I have asked questions about them, you know?
- 4 TE: Hum! For example? Because it was not clear what they were supposed to do, yeah?
- 6 N: Yeah... what's written on the book, actually?
- 7 (...)
- TE [reading from book] It's written..."Look at the pictures. Check what
- 9 applies to you and cross out what doesn't".
- 10 N: Okay...
- 11 TE: So, let's review a little the preparation phase: you give the
- 12 instructions... something that applies to you... after the instructions, what
- 13 should have happened?
- 14 N: Modeling?
- 15 TE: Uh-huh. How could you have modelled that?
- 16 N: I'm stuck with modeling! (...) Hum... I think ....the problem is that I don't
- 17 have time to do what I want to do...
- 18 TE: But you do have time!
- 19 N: No, no no, I don't mean in class, I mean outside of the class...
- 20 TE: Do you think so?
- 21 N: I think so...
- 22 TE: But you're early, aren't you? There are only two more units to do...
- 23 so I think you have plenty of time!
- 24 N: No, I don't mean like that, I mean I don't have time in my life!
- 25 TE: OH, I see, to prepare well...
- 26 N: To prepare, I always think I could do a nice modeling, like showing an
- 27 example on a paper or something...
- 28 TE: But you don't have to!
- **29** N: Yeah, I know...
- 30 TE: Like you said the first sentence, yeah? You gave an example [looking
- 31 at the the book you said... for example "my friend and I play outdoors",

- 32 right? And then you elicited the vocabulary, yeah, of this sentence, but you
- 33 didn't say actually what they were supposed to, you just said the sentence
- 34 "for example my friends and I play outdoors"...
- 35 N: Okaay, and then I didn't ...like...if this applies to you...
- 36 TE [interrupting]: "If this is true about me, if I do this, I check, if I don't
- 37 do this, I cross out."
- 38 N: It would be so simple, right?
- 39 TE: Yeah... so you see, you don't have to prepare extra things, extra
- 40 material... you just have to remember that sometimes the instructions in
- 41 English -because you give instructions in English is not very clear for
- 42 them, yeah, because, although they have been studying English for some
- 43 time, they don't know many things, and this word is not so used, right?
- 44 Apply to you...
- 45 N: Yeah... I thought of that, actually in class, who does that?
- 46 TE: Yeah, because your level of English is so high, that you don't have
- 47 difficulties... with the words themselves... but always try to put yourself in
- 48 their shoes and think... "Do they know this word? Is it a common word"?
- 49 Maybe they would know, because they're used to doing this kind of
- 50 exercise...
- 51 N: yeah, I don't know...
- 52 TE: OK, so, modeling is showing how to do, and you didn't, you just said
- 53 what the exercise is, but you didn't show them how to do. Last MS we
- 54 talked about exploring the pictures... what else you could have expl... you
- should have explored on the page? [showing the book to teacher] besides
- 56 the pictures?
- 57 N: [looking at book] Oh! So many things...
- 58 TE: Besides the pictures.
- 59 N: Oh! The sentences!
- 60 TE: The sentences, yeah! Remember we talked about that a little bit? That
- 61 the sentences are also part of the visual aid...
- 62 N: But then I think "Oh, it's like I'm doing it with them"... like, I leave them
- **63** with no... gap...
- 64 TE: Oh, no information gap?
- 65 N: I think so, because then I'm reading everything with them and they just go
- 66 like check, they don't think...by themselves...
- 67 TE: Okay, okay...
- 68 N: yeah, this time they would go with their partners and talk about it... but they
- 69 didn't because I didn't tell them what to do! Like, "me neither" and everything
- 70 else... but... [looking at book] yeah, I think I missed the two sides of the city
- 71 [the picture on the book].
- 72 (...)
- 73 TE: (...) Because if they were doing in pairs, they would have to
- 74 talk...what was the linguistic goal?
- 75 N: There was no goal because I didn't... do it.
- 76 TE: So you didn't prepare... you just...
- 77 N: I prepared, I just didn't do it
- 78 TE: [laughs] yeah, I mean, you didn't prepare them to the activity, you
- 79 just had them do it...
- 80 N: yeah, no... I remembered after they had already reported it...
- 81 TE: (...) So here... what was the linguistic goal? See things that they had
- 82 in common but what were they supposed to say?
- 83 N: They were supposed to say... well, to each other? Or...
- 84 TE: To each other.
- 85 N: One of them was supposed to say "I do something" and then the other was
- 86 supposed to say "me too/ me neither". And then in the end, to report, that I did,
- 87 they would say like "Both S1 and I ..."
- 88 TE: But here [pointing at the video] they just compared their crosses and
- 89 checkmarks, and they didn't say anything... or maybe they did, in
- 90 Portuguese, or even "me too", but this was not clear they would have to

- 91 say, it was not modeled, again...
- 92 N: Yeah... I see that...
- 93 TE: You see that? Good!
- 94 N: Yeah, I saw it like, right after it!
- 95 TE: Okay! So good! Because before you didn't even...
- 96 N: Because it was right on my face [pointing at the TAF] and I was like "Oh,
- **97** my God"

The belief about "lack of time to do a good modeling" emerged again (lines 16-17, 19, 24, 26-27); however, this time I addressed it; maybe in the previous moment- excerpt 19-I had not understood what Nicole meant, and here, after realizing a moment of cognitiveemotional dissonance ("I'm stuck with modeling", line 16), followed by her perception of the reason why this was happening ("....the problem is that I don't have time to do what I want to do" (lines 16-17), I elaborated on the topic (lines 18, 20, 22-23), being able to understand what she wanted to say when she talked about the time issue. By noticing what she intended to say, I then attempted to unravel the belief by explicitly giving an example of how she could have modeled that (lines 30-34, 36-37), which provoked an a-ha moment for her (lines 35), culminating in another moment of cognitive-emotional dissonance (line 38), which, added to her previous ones, created a growth point. My next mediation, also explicit (clarifying the aspect, lines 39-53) served to make sure this issue was clear for Nicole. Then I went on implicitly, eliciting (lines 54-56), reinforcing previous mediations concerning exploring the material, with the teacher again realizing that she had missed the modeling (lines 68-70, 75, 77, 80), a sign that the concept was on the way to development. Subsequently I was intentional implicit (lines 81-82), aiming at making sure we shared a close/similar situation definition regarding the activity's intent, and by saying what had happened in class I justified the need for modeling (lines 88-91), which Nicole agreed with and recognized as a problem (lines 96-97). It is of utmost importance for a teacher educator to detect when beliefs emerge, bring them to the surface so they can be scrutinized and ideally seize to influence actions, or at least minimize their influence. As Richardson (1996) claims, "Beliefs are thought to drive actions; however, experiences and reflection on action may lead to changes in and/or additions to beliefs" (p. 107).

Later in the same MS there was another interaction showing a problem with modeling:

#### Excerpt 22: MS 5b

1 TE: Okay, then they went to the... oral production, the speaking part, the

- 2 oral production... and what was missing? [TE shows a picture of the book]
- 3 They had to interview and find someone who, right?
- 4 N: Uh-huh [T gets book and analyses the picture] "Do you bla bla bla" ...
- 5 Hmm... Do you think what I did was not so good?
- 6 TE: It was good, but something was missing... you modeled the question...
- 7 N: Yes... the link?
- 8 TE: No, the link was good...
- 9 N: I don't know what I did wrong...I did the modeling...
- 10 TE: Yeah... let me show you something... I hope we can listen... see if you
- 11 can listen [TE shows a part of the class when S1 asked "Do you walks to
- 12 school?" Do you walks to school?"
- N: Oh, I didn't hear that! Ohhh, ok!
- 14 TE: So, you said how to do the sentence... however, they had written
- 15 "Find someone who... walks to school"
- 16 N: Yes, that's why I asked them to ask a question with "do you", and that I
- 17 think S2 said it right...
- 18 TE: And then you took for granted that all of them did... because S2 is
- 19 great!
- 20 N: Yes... who said "Do you walks to school?"
- 21 TE: I think S4 said... because they are just reading, they put "Do you"
- 22 and they're reading.
- 23 N: Ok, I should've said "You know, bla,bla, bla..."
- 24 TE: "So, guys, walks is because I'm talking about she walks... but it's "Do
- 25 you walk".
- 26 N: Especially because this is what they saw in the last unit.
- 27 TE: Ok, so this is modeling, the modeling is not just saying ok, "ask this",
- 28 but paying attention to how you're going to do...and also the answer.
- 29 N: And S3 said "Who here walks to school?"
- 30 TE: Uh-huh, who walks to school, it's perfect! Correct! [laughs] But it was
- 31 not the objective of the... but grammatically it would be perfect. So, here,
- 32 it's very important that they know what to do from the beginning, so you
- 33 wouldn't interrupt them... in the TAF, when you prepared the class, you
- 34 put "I will interrupt them if I see problems in their performance". But to
- 35 avoid these problems in their performance, the preparation should be
- 36 really good...
- 37 N: And I didn't hear... If I was going to check I should've paid more attention,
- **38** I guess...
- 39 TE: Yes, maybe... or... because when you model you get two people... and
- 40 you ask them to role play, you know, open pairs, so, "S4, can you ask S3 if
- 41 he takes the bus"... "Do you take the bus?", then you could have realized if
- 42 there is a problem, ok?
- 43 N: Yeah.
- 44 TE: Because you said, you said how to ask, they didn't... when you model
- 45 you ask for 2 volunteers to perform as the real thing, just to see if they are
- 46 doing correctly, you know?
- 47 N: Okay!
- 48 TE: It's a little different, because you know what you're saying, you will
- 49 say correctly, you know?
- 50 N: Yeah... I keep having problems with modeling, it's horrible... I should... I
- 51 don't know...
- 52 TE: Yes... it's the one thing, I think... to... to work on.
- 53 N: Yes...

This time Nicole showed to students how to ask the question; however, they still had problems when working in groups, which Nicole had not realized in class (line 13). I started this mediation implicitly, by eliciting (lines 2 and 6), in hopes she would come up with what

the problem was, which she did not. Only when I brought this up (lines 10-12), did she realize some students performed the task incorrectly, so I felt I needed to be explicit (giving examples, lines 24-25 and 40-41 followed by clarifying the concept- lines 27-28, 31-36, 39-40 and 44-46), in order to make her aware of a more effective way to conduct modeling. As said by Johnson and Golombek (2016), when engaging in responsive mediation, "sometimes the most effectual thing we can do for a despairing teacher is to tell her what she could say to achieve a particular objective, or to tell him which kind of activity would help achieve an objective" (p. 32). The qualitative variance in mediation of this sort may be due to the teacher's emotional, cognitive, and practical state, which is individual and context-bound, and is very clear with Nicole's cognitive-emotional dissonance regarding modeling emerging again, ("I keep having problems with modeling, it's horrible... I should... I don't know...", lines 50-51). Perhaps this was a moment in which my most effective strategy would have been to lower her anxiety, reiterating or summarizing what she needed to do, but instead I just pointed out she should work on modeling (lines 48-49), employing an explicit strategy (giving suggestions). Once again it is clear that my mediation was more attuned to her needs, and contingent to her difficulties, which shows my maturation towards reaching responsive mediation.

Still in the same MS, there was another moment in which this idea was approached:

## Excerpt 23: MS 5c

- 1 [TE was showing N's TAF on the screen, taking about preparing classes]
- 2 Here you failed to put modeling, you see? You're not even thinking about
- 3 modeling... it's called my attention...
- 4 N: Yeah, you know, I didn't even finish it... it was my first draft, and I
- 5 didn't...
- 6 TE: Okay... so, as we've talked here, the thing you have to worry about is
- 7 preparation
- 8 N: Ok... and modeling...
- TE: So, always try to work really well on this... because performing, it's
- 10 ok, and the accountability as well... but the preparation is a problem...
- 11 here [reading from TAF, pointing at performing phase] in case they don't
- 12 understand how to make the questions, you cannot interrupt them,
- 13 because these [pointing at performing and accountability] should've been
- 14 solved here [pointing at preparation]... the preparation is where you solve
- 15 everything.
- 16 N: Yeaaaah, Okay!!!
- 17 TE: So, work on preparation... preparation, preparation!
- 18 (...) And look at the... because the teacher's book says a lot of things....
- 19 N: I know... it even says the objectives!
- 20 TE: It does..., it says the objectives and it says the.....[reading from
- 21 teacher's book] "help sts with the language they'll need", ok, like, in the
- 22 beginning. (...) Let me see ... [reading from teacher's book] "elicit the

- 23 language necessary to carry out the task, and provide opportunities for
- 24 initial practice", so this is the modeling... so the teacher's book says, tells
- 25 you to do things...
- 26 N: Modeling... yeah...
- 27 TE: Ok? But... I can see that you have done so much so far...
- 28 N: Really? The modeling not, though! Arg!
- 29 TE: yeah, the modeling... but, there should be things for us to keep
- 30 talking! [laughs]
- 31 N: [laughs] I know!

In order to back up what I was trying to convey (the need to work on modeling), I made use of her class plan (lines 1-3), explicitly showing Nicole that she had failed in considering this aspect when planning her class. By doing that, I wanted to demonstrate that planning modeling was essential for her, what went on in my next explicit mediation (clarifying the concept- lines 9-15), aiming at illustrating the scientific concepts related to the aspect. Despite being recognized that a physical class plan might not translate faithfully into what goes on in the classroom, due to the social context of a class (JOHNSON & GOLOMBEK, 2016), I see it as paramount to consider the aspects related to the practice prior to engaging in actual teaching. According to Johnson and Golombek (2016) "For a teacher, the physicality and sociality of a lesson plan interact, but its sociality, or how it is used to organize the activities of instruction, shapes how the lesson plays out in the actual class." (p. 24). Yet, without an initial planning on how to conduct a certain aspect in class, it may become harder to make inflight decisions about how they could be shifted to adapt to the actual class, especially as far as novice teachers are concerned. Another explicit strategy I used was consulting the teacher's book (lines 20-25), which aimed at supporting what I was saying, besides showing her how she could get help in case she was lost. As Kozulin (2003) argues, introducing symbolic tools and/or cultural artifacts may promote change in one's performance and his/her eventual cognition, however provided that the symbols are properly mediated. According to the author, "Symbolic tools have a rich educational potential, but they remain ineffective if there is no human mediator to facilitate their appropriation by the learner". (KOZULIN, 2003, p. 35). The cognitive-emotional dissonance presented earlier is again evident in this excerpt, with Nicole coming to the realization that she had been failing to perform modeling (line 28). Hopefully these moments of dissonance will translate into growth points in the subsequent classes. My intention in line 27 ("I can see that you have done so much so far") was an attempt to lower her anxiety, trying to make her feel better about her performance as a whole, showing I was aware of her difficulties but also of her development. Analyzing it now shows me that my role as a teacher educator was being redefined along the way, with a better understanding of when to be more incisive or more understanding.

In MS 6, as Nicole failed to conduct modeling in her class one more time, we again talked about it, basically repeating the same configuration previously presented: moving from implicit (eliciting) to explicit (clarifying the concept, giving examples). In class 7 Nicole presented a change: she attempted to conduct modeling, which was discussed in the MS:

#### Excerpt 24: MS 7a

- 1 TE: Okay, what was that, that just happened?
- 2 N: I don't really remember if I managed to put things on the board or not, for
- 3 this one, 'cause we didn't watch it right now... did I do the modeling?
- 4 TE: You wrote *Do's and Don't's* [pointing at TV screen]
- 5 N: But I didn't write the... sentences, I didn't do... an example, right?
- 6 TE: No...
- 7 N: I remember doing an example but it was for something else... it was for this
- 8 one [pointing at book].
- 9 TE: But you didn't write on the board...
- 10 N: ... No, I think I did... I put Do's and Dont's and then for this one, I put
- 11 examples of... for Do's and Dont's on the board...And then I asked them
- **12** "When do we use (...) *Dont's*...
- 13 TE: Ah, ok, ok, you wrote.
- 14 N: Okay... yeah, this one [looking at TV screen, referring to the class Excerpt
- 15 just seen] there wasn't really modeling, I think... I think I should've done one
- 16 of them with them...
- 17 TE: Yeah... it was an oral modeling, but it was a modeling... in the past
- 18 you'd just say, in the beginning you'd just say "Ok, let's take a look at the
- 19 chart on the next page and let's try to do...
- 20 N: Okay.
- 21 TE: OK, you wouldn't explain so well.
- 22 N: But, still, I wasn't happy...
- 23 TE: Really? What do you think you should've done?
- 24 N: I think I should've... I don't think I got one example...
- 25 TE: She said [pointing to S4 on the TV screen] "you shouldn't do
- 26 something"
- 27 N: Oh, she did?
- 28 TE: Uh-huh, S4 said "You shouldn't post your... photographs", let's
- 29 imagine this... and then you asked, "was it should... was it Do's or
- 30 Dont's?"
- 31 N: But was it only her that answered?
- 32 TE: Yeah...
- 33 N: That's why I asked them "Do you know what you're doing?
- 34 TE: Uh-huh... but I guess it was clear, because they started doing...
- 35 N: Yeah!
- 36 TE: That's the thing with this group yeah? They start doing...
- 37 N: But for this one [pointing at task on the book] S1 did, and he did it wrong...
- 38 he said "finished" and I took a look at it and said "No, you didn't", because he
- 39 just put like items, like go.. like strangers ask to be your friend. I don't know
- 40 what he did, but he didn't put complete...
- 41 TE: Ah, like don't "Don't add strangers..."
- 42 N: Yeah... so I told him "That's why you finished early, because you didn't do
- 43 it right"... but ok... the others did it right.
- 44 TE: Okay... it was a modeling... yeah, maybe you could have written on
- 45 the board, yeah, then you should've emphasized that you should put
- 46 "Don't" in the *Dont's*...because he put *Dont's*: add strange people, and it
- 47 should be *Dont's*: don't add strange people... yeah, in this sense you didn't

- 48 model.
- 49 N: Yeah, I did the modeling for this one [pointing at previous task]
- 50 TE: You did the... the...the idea modeling, like, "if you say shouldn't, it's
- 51 a Dont's, that's what you did.
- 52 N: Yeah [nodding in agreement]
- 53 TE: So, it was a semi-modeling [laughs]
- 54 T: Almost there! [laughs]

We can notice here Nicole's ZPD's expansion towards the concept was evident. This time just by being implicitly mediated (eliciting, line 1) she could already identify the topic was modeling (lines 2-3), still hesitantly, even doubting her action (line 14-16), which made me be more explicit, reassuring she had conducted a modeling, and pointing out the development she had had (lines 17-19). Engaging in responsive mediation started to reciprocate, as Nicole's reasoning started to emerge: she could identify her modeling/or lack of (lines 24, 49), which did not happen before. We can perceive here Nicole's perezhivanie when dealing with modeling, with her negative comment that she didn't like what she had done (line 22), which I questioned and resorted to implicit mediation again (eliciting, line 23), in order to discover where this dissatisfaction came from, and maybe try to lower her discontent. By her rationale, I could perceive the reason for her frustration, but tried to show her that she was on the right path (lines 44-47 and 50-51), therefore creating an atmosphere where development could emerge by lowering her emotional charge. Our last lines (53-54) show our rapport (laughing), which is essential to creating trust between mediator-mediatee, thus affecting the teacher's volition and cognition, with this atmosphere permeating and shaping our interactions. (JOHNSON & GOLOMBEK, 2016).

Still in MS 7, there was another moment in which modeling was commented. This time, in class, the teacher used the same sentence of the exercise (matching causes and consequences) to show how students should do a task, thus eliminating one of the options. This was commented in the MS:

## Excerpt 25: MS 7b

- 1 TE: [after showing this part of the class] So, what was this?
- 2 N: Yeah... I guess I had already started... [laughs] to me, it was a modeling!
- 3 TE: [laughs] so, now that you saw, what was the problem?
- 4 N: I basically had already started...the...the activity...
- 5 TE: The activity itself! So this was the... performing!
- 6 N: yeah...
- 7 TE: You see?
- 8 N: Now I see... but I didn't see it... at the time.
- 9 TE: Yeah... because it was the same, right? So, the modeling, the perfect
- 10 modeling would be doing the same thing with other options, so you
- 11 wouldn't kill the exercise itself... you see... maybe you could have linked
- 12 the last thing they did... shouldn't yeah? And though about... because
- 13 everything is based on the goal... you thought of the consequences, yeah,
- 14 so "if you decide to add a stranger, what will be the consequences?", and

- 15 then you would have linked to this. That's why knowing the goal of the
- 16 task is really important, because then you can...
- 17 N: link...
- 18 TE: you can link, you can model... I wrote here [reading form COF] "The
- 19 modeling and performing were the same", the same thing, cause after they
- 20 continued doing the same [reading] "Whenever modeling there's the need
- 21 to do it before sts engage in the actual activity, and use other examples"
- 22 N: Uh-huh...

In the aforementioned part of the class, Nicole modeled how to perform the task, but, by using the same sentence from the exercise, she eliminated one of the options. Although there was development in her practice, it was not acknowledged as such, since I only commented on why it had not been a good modeling (lines 9-16). Looking back now, a moment of rapport building was missed, when a simple recognition of what she had achieved would have been beneficial to lower her anxiety towards the issue (as she herself had already reported having a hard time with modeling). This also reveals my twisting path towards achieving responsive mediation, as I provided explicit mediation (lines 9-16) when I could have elicited her reasoning.

However, this passage shows that engaging in stimulated recall session (JONSON & DELLAGNELLO, 2013) invites the participants to analyze their performance, perhaps noticing what they might not have before. In this interaction, Nicole had not realized what the problem was until it was shown to her (lines 2, 4 and 8), which also shows her conceptual development (realizing prior to being told). However, her prompt perception of the problem indicates that the situation-definition concerning this aspect was being redefined, with our conceptual understandings approaching more and more. The implicit-explicit protocol (eliciting, lines 1 and 3 and clarifying the aspect, lines 9-16) was again employed, with Nicole being able to more securely justify her actions, as the concept was under maturation in her internalization process. According to Vygotsky (1986), awareness and planning are important stages towards cognitive development, which is the path Nicole was going through, by becoming conscious of her mistakes, being able to recognize the flaws in her practice, and hopefully planning for an improved performance in the upcoming classes.

In fact, that is what happened in class 8, Nicole managed to use modeling in a way that effectively helped her students understand how to form 'if-clauses', by showing students how they would perform the task, which went as expected, with students producing 'if-clauses' appropriately. This was commented in MS8:

#### Excerpt 25: MS 8

- 1 TE: [after showing this part of the class] Now, let's talk about modeling...
- 2 was there modeling here?
- 3 N: I hope so! [laughs]
- 4 TE: [laughs] I'm just asking this question because of the... [pointing at the
- 5 camera]
- 6 N: Okay! I hope that was a modeling!
- 7 TE: Okay! Do you think the modeling was effective?
- 8 N: Yes! Yes!
- 9 TE: How did you feel it was effective? How did you perceive that?
- 10 N: Hmm because I basically drew the cards on the board, and I made them
- 11 choose, like "Eat it all the time" or "Don't eat it", and then... they saw how
- 12 they should put the cards side by side...
- 13 TE: So, it was very visual.
- 14 N: Uh-huh. Yeap, that was fine.
- 15 TE: Uh-huh. Did you use an example that was in the cards?
- 16 T: No.
- 17 TE: Why not?
- 18 N: Because you told me not to! [laughs]
- 19 TE: [laughs] what is the reason I told you?
- 20 N: Okay, because you'd kill... no, I know, you'd kill one of the... activity.
- 21 TE: Yeah... so you couldn't use it... actually the terms are "you would kill
- 22 the information gap"
- 23 N: Yeah!
- 24 TE: Information gap is what you need in order to... have a reason to do
- 25 something, ok? If I ask you, "Nicole, what's your name", why would I ask
- 26 that? Yeah... so, if you had put an example that they had, why would they
- 27 do that sentence? ... Excellent!

The mediation, almost entirely intentional implicit (eliciting, lines 2, 7, 9, 15, and 19), intended to guide the teacher to reason upon her classroom decisions, when we can perceive that both the scientific knowledge (naming the concept of modeling and her justification of its use) and the spontaneous knowledge (the appropriate use of modeling in class), are consistent in what regards the formation of a true concept under development, as, due to the fact that our MS seized after the eighth meeting, there were no follow-up encounters, which could corroborate the formation of a true concept. As pointed out in Biehl (in press), "Hopefully, the interaction we had resonated in her developmental process, thus enabling her to continue self-mediating towards the full consolidation of the concept." We can also perceive the role of imitation in VSCT, when she tries to remember the nomenclature I employed in the previous encounter ("kill the information gap"), by referring to it as "killing the activity" (line 20). Although naming the concept of "information gap" was still not present in her conceptual development, it was present in her practice, and in the justification she gave for conducting the class like that. Likewise, this excerpt also demonstrates that the concept of responsive mediation had developed in my practice, when I perceived that engaging in implicit mediation was enough for her.

Overall, the systematicity of the aspect modeling happened as follows:

Table 7: Frequency of strategies employed in the pedagogical aspect Modeling. \* (number of occurrences/ total number of interactions)

More frequent	Frequent	Less frequente
Repeatedly employed	Occasionally employed	Rarely employed
<ul> <li>Explaining/ clarifying the concept (30/137)*</li> <li>Recalling (29/137)</li> <li>Eliciting (29/137)</li> <li>Naming (21/137)</li> </ul>	<ul> <li>Giving examples/ suggestions Saying what should have been done (15/137)</li> <li>Asking question to support expert's opinion (8/137)</li> </ul>	<ul> <li>Reading from the material (4/137)</li> <li>Reading from the Teacher's guide (1/137)</li> </ul>

Source: the author

Summarizing the aspect modeling, similarly to what happened with *instructions*, it seems that throughout the eight MSs Nicole and I engaged in, the mediation configuration varied from initially more often explicit – sometimes repetitive – moving to more frequently intentional implicit, showing that initially Nicole needed more help to understand the concept, and it gradually became more clear to her along the MSs, when more implicitness was then employed, hinting that the concept of modeling was on the way to internalization. Concerning the systematicity of the strategies, there was a slight higher number of indirect explicit strategies (39.4% of times), whereas explicit strategies (33.5%) was again slightly higher than implicit ones (27%). Individually, the most used strategy was *explaining/clarifying the concept* (21.8%), followed by *eliciting* and *recalling what happened in class* (both with 21%). Discreetly different from instructions, there was a little more need to elucidate the concept of modeling for Nicole, but overall there was an equivalence of implicitness and explicitness.

What may have justified the need to clarify the concept so many times, and what could have hindered a more dynamic development of the concept were the beliefs Nicole held about modeling: (that "good" students do not need modeling and that it is time-consuming). As Johnson (1999) puts it, beliefs are brought in by teachers at pre or in-service, and due to its attachment to feelings, have an inflexible nature, thus tending to be resistant to change, even if exposed to critical evaluation. Once again, due to the positive results in the end of the eight MS, it may safely be argued that responsive mediation, that is, extensive, constant, in-depth

and goal-directed, is an optimum path for teacher educators to follow when engaging in mediational interactions, and my development during the eight mediation sessions was also clear in the excerpts: although presenting a twisting path, sometimes moving backwards in the process, I can say that by the end of the 8 mediating sessions I was more aware of the impact of the different strategies on Nicole's development.

### 4.3 CONTEXTUALIZATION

Contextualization is another feature related to the preparation of the task in the procedures phase, and, as the name suggests, relates to setting up a context that facilitates the emergence of the class goal (topic to be studied/ discussed), aiming at making students involved before introducing the task objective, therefore, prior to giving instructions and modeling. Jonhson and Dellagnelo (2013) define this movement as *Orienting*:

Situate the concept, skill, or content you are teaching in such a way as to make all of its features salient and relevant to the students; help them, at the start of the lesson, relate to it in some concrete or personally relevant way. This will help them see the 'big picture' and relate what they already know to what you are going to teach them. (p. 6)

Nunan (2004), when describing how to develop instructional sequences when working with TBLA (Task Based Language Teaching), defines this step as *schema building*:

The first step is to develop a number of schema-building exercises that will serve to introduce the topic, set the context for the task, and introduce some of the key vocabulary and expressions that the students will need in order to complete the task. (p.31)

In the TEP material, at the preservice offered by the LI, contextualization is referred to as the moment when the teacher and students get involved in the task. It's the moment before instructions, aiming at creating an atmosphere by: relating the topic of the class to reality, reviewing last topic, brainstorming vocabulary, etc. At the TEP, teachers work on the concept both theoretically (by being introduced to the definition and some ways of contextualizing tasks), as well as practically (given a chance to apply them in the microteaching sessions).

There were basically two types of contextualization that originated mediation in the MSs: the ones happening at the beginning of the class and the ones taking place before listening tasks. For that matter, the ones happening at the beginning of the class will be referred to as *class contextualization*, and the ones related to listening activities *listening contextualization*.

The following extract comes from the first mediating session (MS1), which displays Nicole's lack of understanding with regards to the concept of *Contextualization* and its misapplication in the first class.

#### Excerpt 26: MS 1

- 1 TE: [TE shows the part of the class in which the T starts the class by
- 2 asking Ss if the remembered the video they saw last class, and although Ss
- 3 said they did, she tries to show the video again, but there was a technical
- 4 problem and she could not Ok, ... what part of the class was this?
- 5 N: The opening?
- 6 TE: The opening yes ... remember the three phases of an oral task, in the
- 7 training, there were three phases, right, the Preparation, Performing and
- 8 Accountability...
- 9 N: ok...
- 10 TE: Yes, remember that? So what part of the class is this?
- 11 N: ... Preparation?
- 12 TE: The preparation, Uh-huh... do you remember what you should do
- 13 before engaging in the activity itself?
- **14** N: ... set the mood?
- 15 TE: Set the mood, exactly, or in other words, contextualize.
- 16 N:Uh-huh.
- 17 TE: Do you think that was done?
- 18 N: Actually, I thought I was setting the mood by the video, but I guess I wasn't
- 19 (...) yeah, no.
- 20 TE: ok, why not? Why saying "let's watch the video" is not the
- 21 contextualization?
- 22 N: because they had even already watched it, (...)
- 23 TE: When did they watch the video?
- 24 N: Last class.
- 25 TE: [Nods in agreement] So there were two days (in between classes), so
- 26 maybe they remembered, maybe not... So how do you think you could
- have "warmed up" the class? Because it's the same as saying "let's open
- 28 the book", and you remember in the TEP, the Preservice, that teachers
- 29 shouldn't just arrive in class and say "open the book", so you should have
- 30 a contextualization before engaging in the activity, right?
- 31 N: could I just say... I couldn't do that, right? (...) Hmm, what I wanted to do
- 32 was actually start asking "do you remember the video from last class", but then
- 33 I was so afraid that they wouldn't remember, that I showed the video before,
- 34 you know what I mean, the part I did after this was actually my first plan... and
- 35 then I thought it's like you always... what is the contrary of overestimate...
- **36** TE: Underestimate
- 37 N: Underestimate your students, I feel like I do that, because they remembered
- 38 everything, we didn't have time, the internet was not working, and still they
- 39 remembered.
- 40 TE: Uh-huh, they remembered. So, just by saying "do you remember the
- 41 video we watched last class" and eliciting, as you did in the rest of the
- 42 class, "what was it about?", which was the activity you did after the video,
- 43 right, actually you didn't have to watch the video again, yeah, because they
- 44 remembered.
- 45 N: Yeah, that was my idea, but I was afraid...
- 46 TE: No, yeah... I think you should go with your guts, so that would be
- 47 contextualizing, yeah. Other ideas to contextualize would be to start

- 48 talking (maybe) "Hmm do you like films, do you watch films, what kind of
- 49 films do you like?, do you like documentaries?"(because that was a kind of
- documentary), so if you're starting a class with a video, maybe that would 50
- be a good idea to start, just by raising their curiosity, making them think 51
- about what they're going to see, what they're going to do, etc. ok? And, 52
- 53 what do you think is the importance of warming up? Because it's in the
- TAF for a reason... why do you think contextualizing is important?
- N: well... to warm the brain up! [laughs], and not just throw information, it's 55
- 56 so hard, you know...when you get the whole information and you break into
- 57 pieces, I would do it for a listening activity, well, for everything.
- 58 TE: So, you think it's important, to warm up...
- 59 N: Yes, that was my goal
- TE: That's ok... Hmm (TE reads the TAF filled out by T) the objective for 60
- this task was ...warm up, you said, "it's a link from last class's activity, we 61
- watched a video of a girl who had lost a lot of weight", so the objective was 62
- 63 "to raise awareness of healthy eating habits and bullying. Also, for
- listening skills improvement". And then my comment on the TAF was "even being a link from last class, there's still the need to warm the class 65
- up... how could you have done that? And what's the importance of that?" 66
- 67 N: So you think that maybe not watching the video and just making them
- 68 remember...

64

- 69 TE: Yes, I don't think you would need to watch it, because you couldn't
- 70 and they remembered everything.
- N: Yeah, I was so afraid, but they... because last class I had to switch classes 71
- 72 with somebody else to watch it, I didn't have my tablet or anything, and I
- 73 didn't get their feedback when they left, because we had to switch classes...
- 74 TE: Hmm, there was no accountability.
- 75 N: No, and I was... I didn't know if they got it, that's why I was so...
- TE: But even so you assigned some questions, guiding questions, so... I 76
- think you said... [TE reads in TAF] "How are you going to set the mood 77
- for the task? We are going to watch the movie again. And before that", I **78**
- 79
- N: Yeah...but I wanted to watch the video after the questions, to see if they get 80
- it, like "ok, now let's see if you got it" 81
- TE: Uh-huh, because there was a lack of accountability last class... but 82
- actually with the questions they got everything, right? 83
- N: Yeah, they did.

This interaction, right at the beginning of our first MS, shows that Nicole had the theoretical basis (scientific knowledge) of what contextualization meant, although not being able to name it, neither applying it in her practice (spontaneous concept), meaning that the scientific concepts presented at TEP had not yet merged the spontaneous concepts needed to make it a true concept, despite the microteaching phase of TEP. This can be explained by the fact that the internalization of concepts happen from external (interpsychological) to internal (intrapsychological) spheres, which does not happen immediately, but require continuous participation in pedagogical activities, situated in authentic instructional contexts, as well as systematic, goal-directed, contingent dialogic expert-guided mediation (JOHNSON, 2015, p. 516).

The pseudoconcept is evident by the fact that, although she pointed that out at her class plan (lines 60-66), Nicole did not remember its name, mistaking Contextualization with Opening (which is a session of the coursebook). However, the teacher employed her own nomenclature to explain the goal of contextualization (to "warm the brain up", line 55), which indicates that the goal of the concept might have been clear, although she did not perform it in class.

The mediation provided started intentional implicitly (eliciting, line 4), so I could open a mediational space in which to assess Nicole's understanding of the concept and its functional use, being able to calibrate my mediation according to her current knowledge (JOHNSON & DELLAGNELO, 2013). As she used a term that was not the one used by the LI (opening), I then moved the mediation configuration lightly towards explicitness, employing an indirect explicit mediation (naming, lines 6-8), about the LI's pedagogical aspects, aiming at investigating the extent to which Nicole understood them, as, according to what had been previously explained, I was not the teacher educator in charge of her pre service, neither present at it, so there was the need to establish an expert-like situationdefinition of the concept of contextualization. My next move, another intentional implicit attempt (eliciting, line 10), caused a positive response, meaning that Nicole was able to detect which phase the aspect belonged to, despite being insecure, demonstrated by the use of a question instead of an affirmation (line 11). By that response, I reassured her answer (line 12) and tried again being implicit (lines 12-13), which provoked a hesitant but correct answer (line 14), causing me to again confirm her attempt, but provide the term employed by the LI (line 15), as the sign form, or word, is of utmost importance in developing concepts, as it works as a type of "material sign vehicle that allows novices to function at a level that is out ahead of their current mastery" (JOHNSON & DELLAGNELO, 2013, p. 3). Her positive responses until then triggered my mediation to continue implicitly (eliciting, line 17), intending to observe if she could bridge the theory to practice, by perceiving that there was no contextualization in her class. Her uncertain response (lines 18-19) led me to continue intentional implicitly (eliciting, lines 20-2), which made her reflect upon the reason why what she did in class was not contextualization. My mediation then slightly swung to explicitness, by recalling what happened (lines 26-27), and proceeded intentional implicitly (eliciting, line 26-27), and then slid to explicitness, by clarifying the aspect (lines 27-30), which caused Nicole to provide a correct alternative (asking questions before the video, lines 31-32), but then justifying why she did not do that (lines 32-35), although recognizing her mistake (that

students remembered the video without her showing it again- lines 37-39). My mediation then continued explicitly (giving suggestions, lines 40-44 and 47-50 and clarifying the topic, lines 51-52), and slid back to implicitness (eliciting, lines 53-54). Nicole's correct attempt (lines 55-57) to explain the goal of contextualizing shows that the concept was clear for her in theory, signaling that it was within her ZPD. The mediation then went on indirect explicitly, by reading what Nicole had written on her TAF (lines 60-64), and then intentional explicitly again (eliciting, lines 66-68), causing her to check what was previously discussed (lines 67-68), still insecurely, causing me to again reassure her (clarifying the concept, lines 69-70). Subsequently Nicole revealed the reason why she thought students would not remember the video (she did not have the students' "feedback" at the end of the previous class-lines 71-73), to which I provided the LI's nomenclature (naming the concept - line 74), and continued implicitly (eliciting, lines 77-79 and 82-83).

In the second class, Nicole once again shows that the concept was within her ZPD, performing a contextualization in which she elicited from students what they had worked on the class before, asking them to give examples of the posters they had done previously, which were about what they should or should not do concerning health issues, and connecting them to the topic of the current class, which was pollution. Due to technical problems the first part of MS2 was lost, but there was a recapping of that part of the session later in MS2:

## Excerpt 27: MS 2

- TE: In the first moment we talked about contextualization, yeah, and the
- 2 way that you contextualized the class, and it was very nice because you...
- 3 you... brought the topic from last class to this class and made a link, yeah?
- 4 N: Okay!

We can notice that the concept of contextualization, which had already been present in the previous MS in naming, was transported to her practice already in the second class, and also in the third class, which was commented on MS3:

#### Excerpt 28: MS 3

- 1 TE: So, let's talk about the contextualization...
- 2 N: Okay!
- 3 TE: I think that we can see from the first class that you have been doing
- 4 the contextualization, so you elicited from last class, and tried to link with
- 5 this class ...
- 6 N: Uh-huh
- 7 [TE talks about classroom setting] Let's go on, so you started by
- 8 reminding them what they saw last class, and then you're going to link
- 9 [TE shows the video of the class, with the teacher talking about the
- 10 weather and what people must wear] So, you tried to link the
- 11 "must/can/should" with today's topic, which was weather, yeah?
- 12 N: Uh-huh

My mediation was, in both MSs, indirect explicit (recalling what happened in class), aiming at showing to the teacher that her practice was aligned with what had been discussed in the first MS, signaling that how we had defined that situation (contextualization) was harmonious. It can be argued that I missed the chance to explore Nicole's rationale in an implicit manner, opening up a mediational space in which to work on; yet, the reason why I did it was perhaps to reassure her that she was on the right track, trying to lift up her spirits (because of all the setbacks concerning instructions and modeling). Alternatively, it could also be that it was because I was not aware of the implicit-explicit protocol, and did what I felt was more appropriate at the time.

The mediation offered in MS4 changed in qualitative terms:

#### Excerpt 29: MS 4

- 1 TE: What part of the class was it?
- 2 N: (...) Contextualization.
- 3 TE: Uh-huh, and what did you do in order to contextualize, how was this
- 4 process?
- 5 N: I linked it to last class, and then I wanted them to pick the word technology,
- 6 so I could bring up this up to today.
- 7 TE: Did they do that?
- 8 N: Yeah [laughs] they did [laughs], I knew they would bring it up, technology,
- 9 because that's what they do, they don't know how to play, I even told my mom
- 10 yesterday, I feel sorry for these kids...
- 11 TE: Uh-huh, playing without computers, right? So you got... actually you
- 12 were talking about pollution right? Then I thought, "oh, ok, let's see how
- 13 she handles that"... and it was really well, I think it was really smooth...do
- 14 you feel that?
- 15 N: Yeah!
- 16 TE: Do you feel the difference between what you used to do in the first
- 17 class ... and now?
- 18 N: Oh Yeah! The first class was horrible!
- 19 TE: No, it was not horrible, but do you feel the necessity of doing that or
- 20 you're just doing because the method says you should?
- **21** N: (...) No, I think it's better.
- 22 TE: In what ways?
- 23 N: Hmm I think that it's because they don't feel like: "Ok, today we're going
- 24 to talk about this", and then it's like "ok, let me get prepared". They just go
- 25 with the flow and it just flows. So, I think it's better, you got me!

The qualitative change I went through, as previously explained, is also present in this pedagogical concept, in this MS being almost entirely implicit, by eliciting (lines 1, 3-4, 7), then somewhat sliding towards explicitness by recalling what happened (lines 11-12), afterwards sliding back to implicitness (asking questions to support expert's opinion-lines 13-from "do" to 14 and eliciting, lines 16-17 and 19-20 and 22). By opening up a mediational

space where Nicole could verbalize her rationale and understanding of the concept, I was able to better calibrate my mediation and make it more responsive, catering for the emerging concept Nicole was forming, already present in naming (line 2) and in practice (in her class). Therefore, at this point my development towards my ability to provide responsive mediation had an upgrade, I was more aware of my mediational choices. Her final utterance (line 25, "you got me"), may indicate that at first she did not notice or believe in the importance/ need of contextualizing, and along the four classes and MSs the situation definition was being redefined, with her thought getting closer to mine, although her reasoning was still superficial, as she shows difficulty in explaining the reasons why contextualizing would be beneficial (lines 23-25).

In the introductory session of the unit, the material used in the LI also provided input for contextualization, with textual (vocabulary) and visual elements (pictures, charts, graphs, etc.), both having a significant role in aiding the teacher as far as contextualizing is concerned. Moving along in class 4, after the initial contextualization dealt with in excerpt 29, Nicole continued the contextualization by bringing realia (objects from the 90's) about the topic of the class ("Crazes"), and after students touched them and they discussed their purpose, the teacher instructed students to open the books, inquiring into what they knew about the topic, reading the written examples from the book, however, not exploring the pictures. This issue was brought up in MS 4b:

## Excerpt 30: MS 4b

- 1 TE: [TE shows the class Excerpt described above]. So... after you've
- 2 established what crazes meant, you asked them to open their books [TE
- 3 gets the Student's book and opens on the pages of the class]. The first thing
- 4 you see when you open the book is what? (...) when you open the book,
- 5 imagine vou're a student...
- 6 N: I think I see that [pointing at pictures].
- 7 TE: So, you see pictures, right? You don't see words...
- 8 N: Oh! OK! Sorry!
- 9 TE: No, no problem...ok
- 10 N: Maybe... that's what they see... oh, I think I should've asked them... about
- 11 the pictures.
- 12 TE: What do you think?
- 13 N: Yeah... I should [looking at book].
- 14 TE: Why would you do that? Why would you ask them about the pictures
- 15 first, before they read?
- 16 N: Hmm (...) I think I would do that to, like, explore more "crazes"... but I
- don't know if this is so important since we had such a long preparation...
- 18 maybe this could be a preparation if I had done...
- 19 TE: OK, it could be...
- 20 N: Because, see, we talked about... [looking at book], no, ok, never mind...
- 21 TE: The first thing he said... [TE shows S saying "Power Rangers" in the
- 22 video] was Power Ranger... so, there's a picture of Power Rangers here, so
- 23 the first thing they noticed was the picture... the first thing you notice
- 24 when you open these pages are the pictures, right?

- 25 N: ok...
- 26 Why do you think the pictures are important? Because they're here for a
- 27 reason..
- 28 N: To... to visualize, to visual aid the whole unit... the whole, I mean, goal,
- 29 that is crazes.
- 30 TE: You mean the topic?
- 31 N: Uh-huh... you know, I didn't even notice the pictures...
- 32 TE: Uh-huh, let's see if the teacher's book says something...
- 33 N: I'm sure it does...I really do.
- 34 TE: [TE opens the teacher's book file on the screen and reads from it]
- 35 "Before Ss are in the activity make sure they understand the meaning of
- 36 crazes", which you did, "you may give some examples or use the pictures
- 37 on the page", so one thing would be to use the pictures on the page, the
- 38 pictures are mentioned, they have a purpose, otherwise it would be just
- 39 black and white, which is cheaper... besides, they have the words here...
- 40 "Home alone", for example [TE shows the picture of the film *Home Alone*
- 41 on the page, and the picture is there... so the pictures are here for a
- 42 reason...
- 43 N: Yeah, especially because one of them said he didn't know what *Home Alone*
- 44 was... I could've just shown the picture... I didn't realize it was there...
- 45 TE: Yeah, sometimes we're so worried about what the words say, and we
- 46 forget that we have all this [showing the pages] to support us, to help us..
- 47 like the *Pokémon's* here, so cute... so, you asked them to open the books
- 48 and read silently... how could you have explored the pictures? Thinking
- 49 now... ok, I have pictures... what do you think you could have done?
- 50 N: I could've asked them, like "what do you see, what catches your attention,
- 51 about the pictures..."
- 52 TE: Uh-huh, and do you think this would be better, more positive? In
- 53 what way would this help?
- 54 N: Hmm [...] I think they had already gotten the point, but it could be an extra
- 55 help, actually, if I hadn't done the whole preparation...
- 56 TE: About the word "Crazes", yeah... and if you hadn't brought the
- 57 realia...
- 58 N: Yeah, but I could still use that... as a plus...because actually the words are
- 59 written there, and they could match, actually to understand words that they
- 60 don't know... I think they knew everything, but... not *Home Alone*, for
- 61 example.
- 62 TE: Which is an old movie, right?
- 63 N: Yeah... the word pagers... ah there isn't...
- 64 TE: Yeah, you drew the word pagers... your explanations are really good.
- 65 So, whenever you have an opening, or a listening, or a reading, and there
- 66 are pictures, always remember they are there for a reason, ok, it would be
- 67 much cheaper to do a black and white book...
- 68 N: Yeah... I didn't even notice the pictures...
- 69 TE: I see, I understand, no problem... just...they are there, right?
- 70 N: Yeah.

The mediation this time started indirect explicitly, by recalling what happened in class (lines 1-3), and then implicitly, by eliciting (lines 3-4), using the textbook as a support to illustrate what I was trying to convey. The new contextualization element brought in (exploring pictures) had not been approached before, so I felt the need to elicit from Nicole her take on that, opening up a mediational space for me to see how to work on that, and by

using an indirect explicit strategy (naming- line 7), she seemed to have realized what had gone wrong (line 8), just after providing a solution (lines 10-11, 13). I then implicitly guided her to engage in reasoning (eliciting, lines 14-15), which she did, providing a reason why she would not do it (lines 16-18); however, my goal was to elicit why she would explore pictures, so I went on indirect explicitly showing her on the video and recapping what had happened in class (lines 21-24), aiming at making her realize that exploring the pictures was important, right after eliciting this from her (lines 26-27). Nicole's own justification for exploring pictures (lines 28-29) made me realize we had defined this situation similarly, but her next comment (that she hadn't realized the pictures, line 31), propelled me to resort to an explicit strategy (showing the teacher's guide, lines 34-37), continuing explicitly (clarifying the concept- lines 37-42, 45-48), intending to make her aware of its importance. Following, I proceeded implicitly (eliciting, lines 48-49), and by her positive answer (lines 50-51), I continued implicitly (asking questions to support expert's opinion-lines 52-53). Towards the end of our interaction, I complimented the teacher on her accomplishment in dealing with vocabulary (line 64), creating a positive *perezhivanie*, and explicitly clarified the aspect "exploring pictures" (lines 65-66), as a wrap- up of what we had talked up to that point in this interaction, hoping she would be able to generalize it to other contexts, should they come up in her forthcoming classes. However, this time I did not name the concept of contextualization again (it had been named in excerpt 29, which was the introduction to this excerpt), which could have prevented Nicole from making clearer bridges between "exploring pictures" and contextualization.

Actually, it was in the same MS that the topic emerged again. Later in the same class (class 4), they had a listening exercise, and the teacher made a link from what they were talking about (crazes of the 90's) to what kinds of crazes other kids talk about, asking students to read the instructions and then played the CD. However, on the textbook page there were some pictures that were very important to perform the listening task, as students were supposed to understand the pictures so they could match them with what they listened to, which Nicole failed to do. Here is how the MS went along:

#### Excerpt 31: MS 4c

- 1 TE: Ok, then you're going to start the exercise. Between the instructions
- 2 and the CD, there's something missing...
- 3 N: Hmm...
- 4 TE: Hmm... it has to do with something we talked before [T is silent].
- 5 Take a look at the page... [T looks at the book pages dealt with in class].
- 6 N: Hmm... they should talk about the pictures before?
- 7 TE: What do you think? Why do you think it would be interesting to do
- 3 that?

- 9 N: To contextualize, and to kinda know what they're looking for... does it say
- 10 that in the Teacher's book?
- 11 TE: Let's see... [TE shows the Teacher's book file on screen]... "before
- 12 playing the CD, make sure Ss understand the illustrations.
- 13 N: Hmm, ok... yes, I'll do that!
- 14 TE: Because the illustrations were really tricky (...) well, so in what way
- 15 would it help, to work with the illustrations?
- 16 N: Oh, I know what I did, I asked them to get into pairs to...
- 17 TE: Uh-huh, afterwards...
- 18 N: Yeah, I could've asked them "what do you think this person is talking
- **19** about", you know...
- 20 TE: And why do you think this would help?
- 21 N: It would help so they would know what they're trying to get from the...
- 22 audio.
- 23 TE: Uh-huh, you see... so again, there are illustrations for a reason. So,
- 24 whenever you open a book "oh, they're here, why", so go to the Teacher's
- 25 book, see what they say, or not, sometimes the teacher's book doesn't say
- 26 anything, but it's your judgement, right? If you think it's important, if you
- 27 listen to something and it's tricky.
- 28 N: That would be good, especially because these ones are...
- 29 TE: Yeah, not so easy, right.
- 30 T: Yeah.

As this interaction was just after the one before (excerpt 30), it seems that the situation definition of "exploring pictures" was still "warm" in Nicole's mind, she realized what she should have done only by my implicit mediation (lines 4-5, eliciting), although it was not immediate (I had to show the textbook so she could realize that), and she was still not certain (the use of a question, line 6). My implicit follow-up question (eliciting, lines 7-8) served to invite her to reflect upon the reasons why employing this technique, which she did, giving a spot-on response (line 9), using the correct concept name (contextualize), and the rationale behind it (for the students to know what to look for). By her request, we checked what the teacher's guide said about that (lines 9-10), which helped to make the aspect even clearer and more theoretically based (it was not only me who was saying that, the teacher's guide reiterated my words- lines 11-12). Although I employed the explicit strategy of showing the teacher's guide, it was not my intention (she requested that, possibly due to her lack of self- regulation), and I went on implicitly, eliciting (lines 14-15 and 20), maybe because I felt that her ZPD level had expanded on the topic, so I could be more implicit. I closed up our interaction with an explicit strategy (clarifying the concept, lines 23-27), again hoping she would remember this when faced with a similar situation. We can perceive here that she starts considering the other-regulation of the teacher's guide as a valuable resource, perceiving its pedagogical implications, maybe due to my previous attempts to portray it as an aiding

element, a clear sign of the redefinition of the situation-definition towards contextualization. It is also noticeable that the quality of my mediation was more contingent on her emerging needs, showing that I was more conscious of my choices.

In Class 5, the teacher was able to contextualize it by relating the topic of the previous one ("crazes") with the topic "transportation", exploring the pictures on the pages of the textbook concerning transportation. However, the topic of the unit was "city life", which was not explored by the teacher, and was commented in the MS:

# Excerpt 32: MS 5

- 1 TE: So, what part of the class was this?
- 2 N: It waaaas contextualization... a long one!
- 3 TE: Yeah, no but it's ok, it has always been... what is the topic of the last
- 4 unit?
- 5 N: Crazes?
- 6 TE: Crazes [nodding], so you started talking about this topic, yeah, and
- 7 then you linked to the topic of this unit.
- 8 N: Uh-huh.
- 9 TE: What is the topic of this unit?
- 10 N: You know what, I forgot!
- 11 TE: By watching, what do you think it is?
- 12 N: It was transportation, right?
- 13 TE: I thought it would be, but it's City Life.
- 14 N: Okaaaay.
- 15 TE: Ok... so from watching the beginning, we assume that the topic of the
- 16 whole unit is transportation... but it's a little bit "bigger" than that...
- 17 N: Okay...and then I didn't talk about the differences between the two cities in
- 18 the picture, did I?
- 19 TE: Uh-huh, no... So, you focused on transportation because that was
- 20 your link. But what did you forget to do?
- 21 N: I forgot to talk about the picture, I think...the differences, not only
- 22 transportation... but Hmm, (why did I do that) I think I did that because of
- 23 the... the listening...
- 24 TE: ok, but the listening is about places...
- 25 N: Yeah...I don't know...
- 26 TE: But you linked, it was a great link, very smooth... do you feel that?
- 27 N: No, I feel that.
- 28 TE: That the links are really smooth? It's going naturally. But then, you
- 29 got to the page and... maybe because there are so many interruptions, that
- 30 maybe, I don't know what happened, sometimes you can lose
- 31 concentration, whatever.
- 32 N: Yeah, I think this class, specifically, I was not concentrated at all.
- 33 TE: Oh, why was that?
- 34 N: because of my car, and my exams, and... I made an experience and prepared
- 35 this class... I prepared this class last Friday
- 36 TE: Oh, my, so there was almost a week before class.
- 37 N: Uh-huh, and then I didn't have time to read...
- 38 TE: Uh-huh, to go over it.
- **39** N: So, I think I'm not gonna do that anymore.
- 40 TE: Uh-huh, good, so this is experience, right. Once I had to do this and it
- 41 was terrible, because all your line of thought is lost.
- 42 N: That's what I thought yesterday, I kept looking at the TAF...
- 43 TE: But you didn't remember why you wrote that on the TAF anymore,
- 44 right?
- 45 N: Yeah, especially the "me either, me neither" part... it was right there on my

- 46 face and I didn't do it...
- 47 TE: But it's really good that now you are realizing things before our
- 48 session... before you didn't have a clue about it.
- 49 N: Yeah!
- 50 TE: Now you're like "Oh, I should've done that....". This is the process
- 51 the teacher engages when using this... reasoning, to, to reflect upon their
- 52 classes, to think about what could have happened if I had done
- 53 differently...that's really good... and you are engaging by yourself, I'm
- 54 just here helping you, but you engaged in this before I told you so...
- 55 N: Yeah! Well, during class, I was like "S...", this is not good.
- 56 TE: So, there are so many elements here that you could've explored, yeah
- 57 [TE shows the pages of the book], that have to do with the topic, city life,
- 58 and not only with transportation, which is one of them.
- 59 N: Yeah... I didn't talk about... I remember, I thought about it at the time, that
- 60 this side was the suburbs, and this side was a big city, but I didn't say... I think
- 61 I was expecting them to say anything, but they didn't, and I forgot.
- 62 TE: Exactly... this is the suburbs and this is like, downtown [showing the
- 63 pages on the book]. In our last meeting, we talked about exploring the
- 64 pictures, you did it...kind of [laughs]. But it's a process, too, right. So,
- 65 maybe try to explore more, extract things and have them talk about the
- 66 picture itself, because there are a lot of things... Language Institute gives
- 67 you 2 pages of pictures for you to do that, ok?
- 68 N: Uh-huh.
- 69 TE: But it's so nice that you realized that...

This time I started implicitly eliciting (lines 1, 3, 9, 11), so to invite Nicole to reflect on her class, and by using an indirect explicit strategy (recalling what happened, lines 15-16), I intended to have her see the implication of her actions, which she immediately did (lines 17-18 and 21-22). I then explicitly included an element that had been discussed before in modeling (interruptions, line 29), that could explain why she failed to explore the pictures related to the topic of the unit; subsequently, she came up with other reasons (her lack of concentration due to her busy schedule and the fact that she had prepared the class one week before the actual class), which I agreed with and even told an anecdote, maybe as a way of bonding with her (lines 40-41), also evident in my next lines, complimenting her about her achievements and explicitly providing an expert explanation for this (lines 47- 48 and 50-54). Subsequently, I returned to the aspect at hand (exploring pictures), explicitly telling her what to do (lines 56-58, 62, 65-66), yet acknowledging her development on the topic. Nevertheless, this development was still not enough for her to self-regulate, she still needed the TAF at hand so she could handle the class in an optimum way, reinforcing Vygotsky's claim that mediation goes through other and object regulation, until the concept is internalized, or self-regulated. As evidence of my own development, we can see that I tried to use more implicit strategies (lines 19-20) when in the past MSs I moved along explicitly more often.

In Class 6, Nicole contextualizes her class appropriately, by asking what students remembered from the video watched in the previous class (a technique mentioned in the first MS), which was commented on MS 6:

#### Excerpt 33: MS 6

- TE: So, in the beginning (of the class) S1 was speaking for almost 2
- 2 minutes. And what did you do get the others talking?
- 3 N: I don't remember...
- 4 TE: That's what you were doing here [pointing at the video on the TV
- 5 screen How did you involve all students into telling...
- **6** N: I asked them different questions...
- 7 TE: Exactly! So you asked questions in order to activate their memory,
- 8 right? To see what they remembered, to comment about the film, right?
- 9 (...) So, that's very nice, yeah, by asking different questions you activated
- their memory, because one thing is to say: "Ok, what do you remember about the film?", they will say what they remember, but you activated
- 12 their memory by asking specific questions... nice... and what part of the
- 13 class was this?
- 14 N: I was still linking...
- 15 TE: Yes... it's contextualization, yeah, you were contextualizing...
- 16 N: Yeah, linking to the last unit and contextualizing...

Implicitly eliciting from the teacher (lines 1-2 and 4-5) was the strategy I started using in this interaction, and Nicole's correct response met my expectations concerning how far her ZPD had expanded concerning the topic contextualization: she did it in class, and perceived why she had done it. By explicitly clarifying the topic I hoped I would provide her with expert knowledge on how to justify the use of questioning for contextualization. Notwithstanding, confirming the twisting path to concept formation (SMAGORINSKY, COOK & JOHNSON, 2003), in the subsequent line (14), Nicole mistook the names contextualization and link, which might be explained by the fact that she conducted the contextualizations invariably in this manner: first she elicited or reminded students about the previous topic, and then she linked it to the upcoming topic. Therefore, I named the concept (line 15), attempting to point out that the two concepts are different, which she recognized (line 16). Vygotsky posits that naming is paramount to concept formation, as "words and other signs are those means that direct our operations, control their course, and channel toward the solution of the problem confronting us." (DALLACOSTA p. 106-107)

Right at the beginning of MS7, the aspect contextualization was explored, when asking the teacher about her general impressions of the class, and it was further explored in some other moments of the MS:

### Excerpt 34: MS 7a

- 1 TE: Did you perceive any change when you were preparing the class to do
- 2 the listening activity?
- **3** N: (...) The way I did it?
- 4 TE: Yeah.

- 5 N: Yeah, I decided to make them listen to the ... audio... CD... without
- 6 looking at the... book... first of all because I think there weren't enough
- 7 pictures... here, and I felt like there's no point in making them look at this...
- 8 and... so I decided to just link and make them guess ... what it'd be about...
- 9 TE: Uh-huh... and what do you think about this decision that you made?
- 10 N: I think it was ok... I just felt like I knew... I felt this before the class... I
- 11 thought about it, sorry.... That maybe, after they had already heard, it'd just
- 12 kill the questions... but I wanted to go over every single question before
- 13 listening again, that's why I think I told S1... I think I had decided to do that,
- 14 to ask everybody to put the pencils down while reading the questions, but I
- 15 forgot... to say it... at the time... so when I saw S1 writing I said, "put it down,
- 16 just read the questions".
- 17 TE: Uh-huh... yeah, there were two very different goals...the first time
- 18 you just asked them for a general idea... yeah, they had anticipated, you
- 19 had anticipated with them "What do you think you're gonna listen: are
- 20 they going to talk about the weekend?" because they came up with this
- 21 "or are they going to talk about internet safety?". So the goal was this,
- 22 only this, right? And they listened for this. And in the second time they
- 23 listened they listened for details, so it was a different objective...
- 24 N: Yeah... the problem is that they're so.. kinda quick, they get things, so they
- wanna do it... (inaudible) if I do it with a XX (adult course).
- 26 TE: Uh-huh, with adults, or... but you plan was...
- 27 N: Yeah, I think I fulfilled my goal...
- 28 TE: Yeah, what you had planned... so, let's take a look [TE shows the first
- 29 part of the class contextualization to the teacher] So, you see you had
- 30 almost two minutes just talking before opening the book, so you re-
- 31 explored their first impression of the listening, and then you opened the
- 32 book...and this didn't happen before, you just went straight to the book
- 33 and...
- 34 N: And what's nice about it was that I didn't have my TAF with me, that's why
- 35 in the end I felt good about this class, because some things came, like, more
- 36 naturally, I didn't have to "ok, what am I gonna do"...
- 37 TE: Uh-huh, you didn't resort to..." oh I don't have my paper", so you
- 38 followed your instinct,<sup>5</sup> followed everything we have been talking
- 39 about...
- 40 N: Yeah, it was nice.
- 41 TE: [TE continues showing the video, showing the teacher interrupting the
- 42 task to talk about why she had not come the class before] So, you linked to
- 43 the book...
- 44 N: And then I started talking... yeah... I realized that...
- 45 TE: You did?! [laughs]
- **46** N: I did ... I was like, talking about my friends, my life[laughs].
- 47 TE: So I put here [reading from Feedback form]"Was it the best time to
- 48 talk about this?"
- 49 N: No![laughs]
- 50 TE: Because this is the justification why you couldn't teach the previous
- 51 class... isn't it?
- 52 N: Because there were interruptions... yeah, I realized that...
- 53 TE: So, when do you think... because this is important, they should know
- 54 why you missed...
- 55 N: In the beginning...
- 56 TE: In the beginning [nodding], because you were talking about it, so you

<sup>&</sup>lt;sup>5</sup> By instinct I meant that she acted according to a concept that was already internalized, she did not have to think about the concept to apply in her practice, which might indicate Nicole is thinking in concepts.

- 57 could have linked, and asked, and...
- 58 N: Yeah...
- 59 TE: Of course things come to our minds... but then you had a goal, and
- 60 you were doing the listening, and then it was kinda broken, you feel that?
- 61 Now, watching, or you felt at the time?
- 62 N: No, I felt it, I felt it...
- 63 TE: Then it was too late...
- 64 N: Then I was like... oh, ok... but I didn't realize, like, when I was talking, just
- when I put the CD [laughs]

Nicole's expansion of her ZPD concerning the aspect listening contextualization may be clearly perceived here: she was able to perceive the changes she had made in practice concerning this aspect only by my implicit mediation (eliciting- lines 1-2 and 9). Besides, she also managed to justify her choices (lines 5-8 and 10-16), which were better elaborated and more lengthy (previously her utterances were shorter and reactive), a sign that she was redefining the situation-definition. As I perceived that she was hesitant concerning listening for details (line 11: "That maybe, after they had already heard, it'd just kill the questions"), I proceeded explicitly clarifying the aspect (lines 17-23), intending to have her perceive the differences between the two kinds of listening goals. Subsequently, I also employed an explicit strategy (recalling what happened, lines 29-33), aiming at showing her in the video what we had previously discussed in this MS. Her follow-up response depicts agency, with her verbalization that she "felt good" because she was able to conduct her class in the way she wanted even not having the TAF with her, that it became "more natural" (lines 34-36). This clearly discloses that the concept of pre-listening contextualization and preparation resonated to Nicole, with her practice being more self-regulated, and not exclusively object-regulated by the TAFs, which may reveal that the scientific concept of contextualization (set about at preservice and reestablished in the MSs) and its spontaneous counterpart have started to merge while she put them into practice in the six classes, Nicole being on the way to develop a true concept.

It is also evident in this passage her redefinition of the situation-definition concerning *contextualization for listening activities*, an increase on our intersubjectivity level, regarding interruptions: in a previous moment, I pointed out that interruptions might have been hindering a more effective contextualization (excerpt 32), and this time she perceived it before I brought it up (line 44), and even earlier, in class (lines 64-65). Nicole displayed in this passage a sign of pedagogical maturation and development, having reflected upon her practice during and after classes, and being able to notice and point it out even before I raised it for discussion. As pointed out at Biehl (2016), "it was a moment of self-regulation that made her experience what we could call a conceptual pedagogy". (p. 96). In addition, this

passage also displays that my mediation was responsive, varying from implicit to explicit when needed.

In the same MS, we discussed this even further, as the following excerpt shows:

#### Excerpt 35: MS 7b

- 1 TE: So, this is something that you didn't use to do either, yeah, when you
- 2 had a listening. You asked them to open the books ... [TE gets student's
- 3 book and opens on the corresponding page
- 4 N: and explore, yeah...
- 5 TE: The [showing the page of the textbook] Picture. Yeah, as you said
- 6 there was one little picture, but it was related to the topic, right. But at
- 7 least you did that. Why did you do that?
- 8 N: I don't know, actually, it wasn't planned...
- 9 TE: Oh, really?
- 10 N: No, when I saw it I was like "Oh, ok, I'm gonna work with that", but I
- 11 hadn't planned to do that because... I wanted them actually to just explore the
- 12 questions, because I really felt like this [pointing at picture] was so small, and
- 13 that's why I decided to, to make them guess what the listening was about, but
- 14 then I just did it! [laughs]
- 15 TE: Uh-huh, and do you think it worked? Do you think it served the
- 16 purpose of... of... trying to anticipate, and trying to make it easier for
- 17 them to understand?
- 18 N: Yeah, yeah.
- 19 [TE continued showing class 7, when the teacher asked Ss to read the
- 20 options of the questions to be answered before playing the CD] So, what
- 21 did you do in this class that you didn't do in the previous listenings (from
- 22 the classes that I attended)?
- 23 N: I... explored the... questions.
- 24 TE: Uh-huh, and why did you decide to do that? Read the options, yeah...
- 25 N: Hmm, so they know what they are listening for? [...]
- 26 TE: It's just that I realized in this class that you did things in the listening
- 27 that you didn't do before...
- 28 N: Yeah! Ok! Because the only meeting -that's why they are so important the
- 29 only meeting I went to at LI was about the pre-listening... and then we got
- 30 together in groups and planned the pre-listenings together, and... I had these
- 31 ideas... with a partner... cause she's been teaching there for ten years, then I
- 32 realized "Oh, I need to change this". So...
- 33 TE: Uh-huh... we have been talking about this! A lot of times...
- 34 N: [laughing] Yeah, but you know when you need something that just makes
- 35 you... [T snaps her fingers]
- 36 TE: Click
- 37 N: And then... yeah, that's why.
- 38 TE; Uh-huh, yeah, nothing like hands-on...
- 39 N: Yeah.

In the last interaction about contextualization in this MS, Nicole credited the development of the concept of listening contextualization to a meeting she had attended at the LI, with other fellow teachers, focusing on pre-listening tasks. This indicates that, due to the fact that we had spent more than three months discussing this aspect, the concept was already in her conceptual framework, and when she engaged in a more practical learning moment, she

was able to generalize it and apply it in a context that was different from the study we conducted (looking retrospectively at her practice), but directed to her everyday practice (aiming at her prospective practice). This hints at the importance of hands-on meetings, with colleagues, also equalizing the power relations present (teacher-teacher instead of our teacher educator-teacher configuration), playing an important role from an emotional perspective, which may have made her more comfortable and at ease to learn, triggering an opportunity for her to play her agency and intentionality (CERUTTI-RIZZATTI; DELLAGNELO, 2016).

Al in all, the mediation we engaged in was probably the fact that propelled Nicole to understand and apply the concept properly when planning a class with a peer; had she not had the mediational moments we shared, she may not have been able to grasp the idea of contextualization so clearly in the peer meeting. Our conversations, with sustained moments of goal-directed interactions that brought theory (the [re]introduction of the concepts) and practice together, and focused on lessons that the teacher was currently working on, were meaningful and systematic enough to push her development forward. (JOHNSON; GOLOMBEK, 2016)

The aspect contextualization presented the following systematical configuration:

Table 8: Frequency of strategies employed in the pedagogical aspect Contextualization. \* (number of

occurrences/ total number of interactions)

More frequent	Frequent	Less frequent
Repeatedly employed	Occasionally employed	Rarely employed
<ul> <li>Eliciting (40/122)</li> <li>Recalling (31/122) *</li> <li>Explaining/ clarifying the concept (14/122)</li> </ul>	<ul> <li>Asking question to support expert's opinion (11/122)</li> <li>Naming (10/122)</li> </ul>	<ul> <li>Giving examples/ suggestions Saying what should have been done / (7/122)</li> <li>Reading from the material (7/122)</li> <li>Reading from the Teacher's guide (2/122)</li> </ul>

Source: the author

The aspect contextualization seemed an easier and smoother concept that Nicole developed, at first displaying "empty verbalism" or "mindless learning of words (Vygotsky, 1986), in which the concept was still at an abstract level in her conceptual framework (having been introduced in the pre-service, when revisited in our mediations she lacked associating it to its purpose, as the use of "opening" demonstrated). With the mediating sessions, already in the second MS, the term started making sense to her, by seeing in her practice what she had been previously introduced to in naming, yet, following a twisting path, showing some

inconsistencies along the way. Similarly, my mediation shifted from more explicit to more implicit, yet contingent on her needs, suggesting that my development towards becoming a more responsive teacher educator had also evolved.

Systematically speaking, differently from the two previous concepts (instructions and modeling), there was a moderate higher number of implicit strategies (41,8% of times), as opposed to explicit (18,8% of times), while indirect explicit strategies were also recurrent (39,3% of times). The most used strategy was *eliciting* (32,7%), succeeded by *recalling what happened in class* (25,4%) followed by and *explaining/clarifying the concept* (11,4%), which may indicate that the concept contextualization was more clearly organized in Nicole's developmental path, thus needing less help to be internalized. Nicole's more prompt development of this aspect may have been due to her readiness to accept the concept (it made more sense to her), and/or that her ZPD was more attuned to it. Her redefinition of the situation was present from the second MS on, with our intersubjectivity level gradually increasing along the way.

The last aspect to be analyzed is *links*, which was also somewhat smoother to be developed, although revealing a twisting path as well. As it was sometimes mentioned and associated to contextualization by the teacher, it will be subsequently analyzed.

# 4.4 LINKS

The concept of *link* refers to class flow and sequencing of activities or tasks, chaining activities together to form a logical sequence, ensuring a better coherence and consistency for the lesson (NUNAN, 2004). In other words, a link is a common thread that connects the previous or current aspect in a class to the upcoming one, so that the lesson flows as a whole unit. In the TEP material, it is claimed that: "a lesson reflects the concept of structuring when the teacher's intentions are clear and instructional activities are sequenced according to a logic and structure that students can perceive" (RICHARDS & NUNAN, 1990, p. 11). It is also pointed out that "transitions actually link ideas and tasks together so that students can see the whole picture" (POLIFEMI, 2006, p. 35). Some common linking techniques are: relating the previous/current topic to the next one; relating to the kind of task; instigating students to what

will come next; exploring visual elements present on the material; inviting students to predict/anticipate what will come next, among others.

Nicole's first class had seven tasks, with no links between each of them. This was commented in some moments during the first MS. The first interaction refers to a part of the class in which the teacher and the students were talking about bullying, when Nicole suddenly stopped the conversation to get some papers, saying "don't show", then throwing them in the air, saying "Go!". Then, students picked papers from the floor, and only after that the teacher explained what they were supposed to do, starting another task (writing about some bullying situations depicted in the slips of papers).

### Excerpt 36: MS 1a

- TE: Here you changed tasks, yeah, you went from one task, they were
- 2 reporting about bullying in their school, and then they're going to another
- 3 task. (that of picking papers from the floor) What's missing here? [T is in
- 4 silence]. When you change from one task to another?
- 5 N: I didn't think there was something missing, because the next task was about
- 6 bullying. But then I felt that maybe I should've told them the instructions
- 7 before I gave them the papers...
- 8 TE: Exactly... so you see, this is called *link*. The importance of links is not
- 9 to have chunks in the class, so they feel it's a flow, a movement, a thread
- 10 that links all the activities together. So just... how could... how do you
- 11 think you could have done the link? Because the way... do you see now?
- 12 Do you wanna see it again?
- 13 N: No, I see... (pause)
- 14 TE: You were talking about bullying, and the guy was called bolota, bolota
- 15 and... [TE makes gestures as if picking up something from the table].
- 16 "Don't show!", ok so this is "oh ok, what's going on?" Ss might feel like
- 17 this: "what's going on?" "Have we finished?"
- 18 N: Ahh, ok!
- 19 TE: So, how do you think you could have linked? The other activity was
- about bullying too, yeah, but what is the common thread that linked one to
- 21 the other?
- 22 N: The funny part was that I thought this was the link, all this.
- 23 TE: I know, it's here [showing the TAF].
- 24 N: I don't know, maybe... I should have introduced it... ah "how"...
- 25 TE: They were talking about bullying at school, examples...
- 26 N: Uh-huh, and then they had to make a...
- 27 TE: They were going to show a picture of people who might have
- 28 (suffered) bullying...
- 29 N: Story about... Uh-huh. Maybe I should have... humm, but I didn't want
- 30 them to see... maybe I should have given them the pictures and said "oh guys,
- 31 so think of what might be going on with these people I'm gonna give you,
- 32 don't show each other"
- 33 TE: Uh-huh, so, while giving or even before giving, right? You could even
- 34 say "Oh, we're talking about bullying in our schools, and we're talking
- 35 about bullying in my life, in your life, and so on, but let's think about
- 36 bullying with other people, what other people might feel", and then you go
- 37 on and explain the task, ok?
- 38 N: [Nods in agreement].
- 39 (TE brings up the topic instructions, then goes back to links) TE: So, in the
- 40 preparation you have: the contextualization; when you are between tasks,
- 41 the *link* is the warm-up, so the contextualization is in the first task of the
- 42 day, ok, you warm up not to go... not to say "let's take a look at the book";

- 43 then you have the task, then you have the accountability, then you link
- 44 from the accountability ...the story about bullying in their schools was the
- 45 accountability of the first task, it was not the link, ok? Because checking
- 46 what they understand is not accountability, it's just checking what they
- 47 understand... the accountability is how you relate this to your life, and you
- 48 did it perfectly, you asked about situations of bullying in their school...
- 49 N: That was the *accountability*? I didn't know that!
- 50 TE: Uh-huh... so the *link* would be...the second task would be this writing
- 51 activity, so the *link* would be: the accountability moment of the bullying, to
- 52 the writing... and then you can say "as we're talking about examples of
- 53 bullying in our school, let's see other examples of bullying, but you will
- 54 create"... something like that...
- 55 T: Humm, ok.

In our first mediation about links, after an initial implicit attempt (eliciting, lines 3-4), I noticed that Nicole's understanding of links was a pseudoconcept (she believed that a second task with the same topic would be a link, lines 5-6), so I proceeded indirect explicitly, naming the concept (line 8) and more explicitly, clarifying it (lines 8-10), followed by another subsequent implicit attempt (eliciting, lines 10-11). By realizing that the teacher was at a loss for words, I tried again sliding to explicitness, recalling what had happened in class (lines 14-17), which seemed to ring a bell for the teacher (line 18). Even trying to recall what was going on in class again (lines 25, 27-28), because of her lack of understanding of the concept (line 22), it was hard for her to come up with ways to link the two tasks together, as she thought that the second task was the link, showing that we were operating with very different situation definitions concerning links. Even with my explicit explanation of what links were, she still did not understand it to the point of putting it in practice (lines 29-32), maybe because she failed to understand it or perceive it in her previous attempts teaching, and even in the TEP, when perhaps this aspect had not been worked on so explicitly, or possibly that the mediation provided then was not responsive to her ZPD, that is, attuned to her emergent capabilities, yet aware of her actual state of development, which is explainable by the fact that in the TEP there were 15 participants. When I noticed that the concept was too intricate for her to be able to come up with ideas for doing it, I went on explicitly giving examples of how she could have done the link (lines 33-37), and again explicitly reiterated it, joining the scientific concept to the spontaneous one (lines 39-54).

This initial interaction showed that Nicole held some beliefs concerning links, equating it to tasks with similar topics, which made me tackle the topic on another occasion in the same MS:

#### Excerpt 37: MS 1b

- 1 TE: So, again, there was no link... they were reporting the papers, and
- 2 then you showed the picture...
- 3 N: I did before?
- 4 TE: No this was after... the last girl read the story, and then she came
- 5 back, and you gave her advice, and so on, and then you collected the
- papers, and then... there was another... task, right?
- 7 N: Uh-huh [nodding]
- 8 TE: So, there was no link between the story (about bullying), and the other
- 9 task, about weird food...
- 10 N: Ahaaammm.
- 11 TE: So, how do you think you could've done the link? The girl was talking
- 12 about bullying, and then you wanna talk about food, something different,
- 13 so, you see, the class is really segmented [gesture showing segments]... so,
- 14 what link could you have provided?
- 15 N: (...) Somebody that suffers bullying for eating weird food...
- 16 TE: It could be! Good! Perfect! So, you see, with time of course, you're
- 17 just entering LI-, with time your links are going to be very easily done, it's
- 18 gonna be very easy.
- 19 N: I just hope that I don't spend so much time...
- 20 TE: I understand, it's normal... so, you're talking about bullying... you
- 21 can even tell a personal story: "You know, once I suffered bullying
- 22 because I liked to eat chicken hearts in the USA" you said this in class.
- 23 N: Ahhh, ok!
- 24 TE: "And they bullied me, nobody should eat chicken hearts! So, do you
- 25 know any other kinds of weird food?" So, you would prepare them for the
- 26 topic "weird food", yeah? Of course, elicit what weird is, and then you'd
- 27 go to the topic, you see... sometimes it's one sentence that leads one task to
- 28 the other, it could be very simple, it doesn't have to be very elaborate...
- 29 but sometimes finding this thread is a little hard, but you're going to get it,
- 30 you already have ideas!
- 31 N: Yeah, I could get that they were so, like... [gesture depicting fragments, or
- 32 segments] chunks...
- 33 TE: Yeah, did you see now? [pointing at TV screen] It's like starting a new
- 34 class, you know? You start a class at the beginning, and then you continue
- 35 with the class [making a wave movement with hands]
- **36** N: Ok!
- 37 TE: But I'm sure that it's gonna be very easy for you!

In the second time we talked about links, in the same MS, Nicole already started realizing what had gone wrong in the class (line 10) when I used indirect explicit strategies (recalling what happened, lines 4-6 and naming, lines 8-9). By noticing that she had understood what I was referring to, I tried proceeding implicitly (eliciting, lines 11 and 14), laying the ground for her to build up a rationale for coming up with ideas (lines 11-13). Her attempt to think about a way to link the two topics was then appreciated and praised (line 16), by reassuring her that she would promptly learn this aspect, I aimed at creating a positive feeling for the teacher, possibly enabling her *perezhivanie* to be positive. In order to reinforce the aspect, I went on explicitly giving examples of what she could have said and done in the class (lines 22-23 and 25-26), besides clearing up the concept (lines 27-31 and 34-36),

attempting to make her realize that links were neither difficult nor time-consuming (another setback she brought about in this session, repeating the obstacle she perceived at modeling).

A little later in the same MS this aspect of links was again mentioned:

#### Excerpt 38: MS 1c

- TE: [talking about a moment in class when there was an accountability of
- 2 a task where students were supposed to create a weird menu, followed by
- 3 another task So, your accountabilities are perfect, 'cause they don't just
- 4 report... and look at each other... you ask them to report and engage, ok?
- 5 That's very nice... but then you said "Let's play a game", and that had
- nothing to do with the menu, right? And then you were going to play a 6
- game about a principal...
- N: Uh-huh... 8
- TE: That would be perfect, but then you changed your mind, see [TE
- shows a part of a class where N proposes a game task, and then asks 10
- students to open their books]. Why did you change your mind and go to 11
- 12
- N: That was my first idea... my idea was actually to show the book before, I 13
- 14 don't know if it's written there [pointing at TAF], or I decided after, but now
- that I see it, the game'd be perfect... 15
- 16 TE: Yeah, because you're talking about menu, and then the link could've
- 17 been... ah, a cafeteria, "Do you have a cafeteria in your school?", "Is there
- a menu in the cafeteria?", "Imagine having this kind of food, that you 18
- created in the cafeteria, would you eat that? So, let's pretend that we have 19
- a cafeteria at LI, but the principal is responsible for the menu." Okay? 20
- And then you'd have [hand movement of waves]. That'd be perfect, 21
- 22 perfect link, but then you changed your mind...
- 23 N: Yeah...[nodding]
- 24 TE: And then you asked them to open their book... again there was no
- link to go... the students might ask "Why is the teacher going to the 25
- book?" Yeah? "What am I going to see in the book, as we're talking about
- weird food?" So, you could've... again, no link, right, to the book. You 27
- could've said, simply "You know what? The book has a lot of weird food 28 too, let's take a look?" Very simple, very simple... it's just a little sentence 29
- that makes them want to do the other thing, to open the book, to do the 30
- other activity, to see a relationship between what you're doing.... 31
- N: Okay! [nodding]

My mediation in this last interaction in the first MS was overall very explicit, with an attempt of implicitness at the beginning (recalling what happened, lines 5-9 and eliciting, lines 11-12), followed by explicitness (giving examples, lines 16-20 and 28-29), mingled with clearing up the concept (lines 21, 29-31), reassuring that links could be easily done ("Very simple, very simple", line 29), again trying to have a positive perezhivanie for her. On the other hand, not being implicitly mediated prevented Nicole from having a chance to externalize her reasoning, as this was the first MS and I was still assessing where she stood as far as links were concerned, thus missing an opportunity to perceive her rationale. As Johnson and Golombek (2016) state, when teachers externalize their emerging understandings they give "teacher educators insights into teachers' ways of 'seeing and being' in the world. Such insights offer teacher educators an orienting basis for action from which they can work to support and enhance the professional development of L2 teachers." (p. 14). Unfortunately at the time I was not aware of that, and maybe was trying to show her that I had expert knowledge about the topic, which signals a lack of understanding of the concept responsive mediation. However, by exemplifying ways to have links between tasks, I was hoping to lay down a foundation on which Nicole could bind this instance to future ones, in upcoming classes. At a first moment, Nicole and I did not share the same situation-definition over what links were, and my expectation was to accommodate that as we engaged in negotiation of meanings, creating a "temporarily shared social world" (WERTSCH, 1985, p. 161).

In the second class, Nicole contextualized the class by referring to some posters students had devised about health problems in the previous class, linking it to the topic of class 2, which was pollution. Here's how the mediation went:

## Excerpt 39: MS 2a

- TE: [After showing this part of the class to T] So, you're saying that
- 2 maybe because we buy industrialized things we may have more cancer
- 3 than in the past, and besides, these products have wrappers, and they
- 4 produce a lot of trash. So, by getting what they talked about cancer ,
- 5 and expanding this, you linked to the second unit, which was trash,
- 6 pollution, and so on. So, this was a perfect link!
- 7 N: Thank you!
- 8 TE: Yeah, you contextualized from last class, and you made a link to go to
- 9 this class.
- 10 N: Nice!
- 11 TE: Had you planned to say these things?
- 12 N: Yes [inaudible]
- 13 TE: So you planned "How can I link this to go to the book"
- 14 N: Yeah, I did.
- 15 TE: Very good!

My previous feeling that I had missed a chance to be more responsive was not sustained, as her second attended class demonstrated that she had understood the concept and performed it with confidence, showing that this concept had become clear for her with little mediation, also depicting that we have come to share a similar situation definition of it; the mediation we engaged before, all in all very explicit, served the purpose of orienting her to apply the concept in her subsequent class. As Johnson and Golombek (2016) state, at times we best course of action for a teacher educator to take is to tell a "despairing teacher" what to do, given the mediation be anchored in expert theoretical basis.

My mediation in MS2 was a mixture of indirect explicit (recalling what happened and naming the concept, lines 1-4 up to "trash") and explicit (clarifying the concept lines 4- from

"So" to 6 and 8-9). Once more, I complimented her, this time on her practice (line 6 and 15), which at the time was a spontaneous reaction to the development I had realized after just one meeting, and looking back it may also have had some impact on Nicole's *perezhivanie* concerning the aspect links, prompting her to feel secure and at ease with this topic.

Later in the same MS the concept was commented on again:

## Excerpt 40: MS 2b

- TE: [Showing the excerpt of the class to T] They (Ss) were talking about
- 2 things they were supposed to write, in the previous part they were
- 3 supposed to write about how... what things to do to help the environment,
- 4 yeah. So, they were reporting and discussing about that. [TE and T
- 5 continue watching the Excerpt] And then you asked them hummm "Do you do these things?" And do you think he does that"? "Do you think I do
- 7 that?" [T nods in agreement] And what... what was this?
- 8 N: The link?
- 9 TE: Yes! [laughs] and it was really good! Because you linked from what
- 10 they were talking about to the topic of the next task, yeah.
- 11 N: Uh-huh.

Nicole continued showing that she had understood the concept of *links* in another instance, linking a task to another in class 2. My mediation started indirect explicit (recalling what happened, lines 1- 7 until "that"), sliding to implicit (eliciting – line 7 starting with "And"), in an attempt to verify if Nicole were already able to reason upon the concept. Her response, still hesitant (line 8), showed that, although already apparently having understood the concept, it was still early for her to have internalized it, (which is normal, due to the fact that teachers need sustained mediation and opportunities to reason), and thus triggered my positive comment (line 9 "and it was really good"), trying to reassure her reasoning, lowering her anxiety, finishing with an explicit strategy (clarifying the aspect – lines 9-10), an attempt to explain why her link had been good.

Correspondingly, still in MS2 there was another mediation concerning *links*. This time, Nicole performed it, but there was a little problem in its execution: instead of linking and going to the book, she asked students to open the book and then linked to what they had been talking about previously. This is how the MS happened:

### Excerpt 41: MS 2c

- 1 TE: [after showing this excerpt of class 2] So, what part of the class was
- 2 this?
- 3 N: It was the... wait! It was the link?
- 4 TE: Uh-huh
- 5 N: But I did it backwards! I got it!
- 6 TE: Yes, so, you made the link, but instead of saying "There are other

- 7 people who also talk about the environment, let's see, go to the next page",
- 8 you said "Let's go to the next page because...". It's not a problem, but the
- 9 flow is a little interrupted, you see?
- 10 N: Yes, yes, I told you it's because I forgot to do it, and then I
- 11 remembered...
- 12 TE: I hope it was not because I was there!
- 13 N: No, it's actually, it was actually the second time I was trying to really do the
- 14 link
- 15 TE: You got it! Of course, there is some room for improvement, but we
- 16 had only one MS!

The aim of the link is to connect one idea to another; similarly, in a class, it is used to join what the teacher and the students were engaged in to the subsequent activity/task. When the teacher leads students to naturally "open/turn the page", without having breaks in the flow lesson, is a well succeeded link; students who know why they are moving from one activity/task to another before they actually do it, may find it more natural, purposeful and smoother. Nicole's realization of this aspect before I told her (line 5) showed that, although she had not mastered it in performance, she could already perceive it, merely by my implicit mediation (eliciting, lines 1-2). The explicitness of my mediation (recalling what happened-lines 6-8 and clarifying the concept - lines 8-9) aimed at reinforcing the scientific concept to Nicole, as it's under development (her comment on line 10 indicates that), attempting to make sure she would be able to see the reason why applying the concept the way I had explained, hopefully in upcoming classes.

In class 3, the teacher had a link between activities that was not so effective due to another pedagogical aspect – information gap (the lack of knowledge one has, which prompts them to start an interaction). Nicole had a class conversation about the weather, then linked to the task on the book, which also dealt with the same exact topic she and the students were talking about, so the task had already been fully explored in the contextualization. The mediation went as follows:

## Excerpt 42: MS 3

- TE: [Showing the excerpt of the class to T] So, this was your link, yeah,
- 2 you were talking about problems, what they must do when they face that
- 3 kind of weather: "It's hot, you must... eat ice-cream". And then you said
- 4 "What's the climate like in Florianópolis?", yeah, and then you started
- 5 talking about the climate, and then you went to the next page, right?
- 6 N: Uh-huh.
- 7 TE: Do you know the meaning of information gap? [teacher is silent] It's
- 8 something you should've learned at preservice.
- 9 N: The information gap to me is like... kinda like, what's missing, that students
- 10 need to, to... I can't explain it... to get from his knowledge, from the book,
- **11** from ...
- 12 TE: Or from interactions with others, for example, if I ask you "Nicole,
- 13 what's your name?" Is there information gap in this?
- 14 N: I don't know... you know my name... no...
- 15 TE: Exactly, there's no need to ask for this. So, you linked the exercise to

- 16 what's the weather like in Florianópolis, and then everybody talked...
- 17 N: [laughing] and then they...
- 18 TE: And the book says...
- 19 N: Yeah, I get it...
- 20 TE: The book instruction is "What's the climate like in the place where
- 21 you live? Use the words in the box to complete the table. Then, compare
- 22 your answers to a classmate." So, actually, you were already talking about
- 23 the climate in Florianópolis...
- 24 N: Yeah... I could've shown a picture of another place... [TE nods] yeah, I did
- 25 the activity twice...
- 26 TE: yes ... do you see it?
- 27 N: of course!
- 28 TE: Sometimes we don't realize we're killing the information gap, yeah?
- 29 They could've said "teacher, we just talked about it, why are we going to
- 30 do this?"... maybe they thought about it, but they're too polite... as you
- 31 were talking about places that are really cold, for example, a guy, it's
- 32 snowy, what he must do, he must put on a coat, maybe you could've linked
- 33 from there, "So, where do you think he's from? Oh, he's from ... Russia.
- 34 Oh, what's the weather like there? The weather is this, that. Oh, so let's
- 35 talk about our weather here, take a look at..." You see, the link? We can
- 36 get from what they were doing to go to the next one without killing the
- 37 information gap... they did it, they didn't even realize, but... you talked
- 38 about the same thing twice...
- **39** N: Yes...

The importance of links was clear to Nicole, since she was attempting to perform it in every class; however, there was an aspect that she was not aware of, maybe because it had not been explored at preservice, or due to the fact that she did not remember, which is information gap. As previously mentioned, I was not in charge of her preservice, nor was I present at it, so I started the mediation indirect explicitly (recalling – lines 1-5), to situate her into what I wanted to comment on afterwards, and then I continued implicitly, eliciting about this concept (lines 7-8). By her hesitating response (lines 9-11), I went on explicitly (clarifying, lines 12-13, until "name") but still trying to check if she had understood it, continued implicitly (eliciting- line 13 "Is there information gap in this?"). Her realization of the concept came (lines 17 and 19) when I linked the concept of information gap to the example in the class (recalling, lines 15-16). Subsequently, I used indirect explicit strategies (reading the book- lines 20-23), attempting to back up my rationale, which already triggered in her an idea of how she could have done it differently (line 24), recognizing her mistake (lines 24-25). By asking her a question to support expert's opinion (line 26), I implicitly wanted to ascertain that she had already understood the concept, but still I proceeded explicitly, giving examples (lines 30-35 up to "at"), and I ended this mediation clarifying the concept (lines 35- from "We can" - 38). Once again I missed the chance to explore her

reasoning and her take on the importance of the concept, displaying lack of responsive mediation.

In class 4, the teacher was able to perform a link that was very much in accordance to what we had been discussing so far: she brought objects from the 90's to class, had a discussion about them with students, and then asked them to open the book to the unit about this topic. The mediation went like this:

## Excerpt 43: MS 4a

- TE: So what part of the class was... or what was the sequence... what was
- 2 that, that you just did?
- 3 N: Humm. Ok, all that was the preparation for the... task...
- 4 TE: Uh-huh, before that was the preparation.
- 5 N: Uh-huh and I think I tried to link... I don't know if I did...
- 6 TE: Uh-huh, how do you feel... why you didn't think you linked?
- 7 N: Oh, because I didn't think I emphasized it, I said, "oh, let's see other kinds
- 8 of crazes", but I don't think they even paid attention to that...
- 9 TE: Oh ok... do you see the difference of this link from the ones you were
- 10 doing before? (it was a link)
- 11 N: It was a link?... ok! Hum...
- 12 TE: Do you see what you did differently this time? From the ones you did
- 13 before?
- 14 N: [Pause] Yes! First I said "let's see other kinds of crazes" and then I said,
- 15 "let's go to page..."
- 16 TE: Exactly! There was something in the middle, but it would have been...
- 17 yes, so "let's see what other people have to say about it, let's open the
- 18 book", instead of the opposite. What do you... why did you do this this
- 19 time?
- 20 N: Because you told me [laughs]... because... no, I get it, it's like, they don't
- 21 even know why they're opening their books, so it's better if I tell them,
- 22 although I think I should have "oh, let's see other kinds of crazes"
- 23 TE: Again..., because you were talking about music in the middle...
- 24 N: Uh-huh...
- 25 TE: Do you think that's positive, or it's just something you're doing
- 26 because you have to?
- 27 N: No, I get the point, I get it.
- 28 TE: Uh-huh, what is the point?
- 29 N: To me the point is that, it's like meaningless, yeah, "open your book", then I
- tell them what they're supposed to do, and then it's not smooth, like they're
- 31 more interested in opening their books if I tell them why they're doing it...
- 32 that's why!

Despite showing improvement in relation to the concept of links, having perceived it by my implicit mediation (lines 1-2 and 6), Nicole was at this point at an intermediate stage in the development of the concept, having developed thus far a pseudoconcept, managing to perform a *link* according to what we had been discussing, yet still hesitant about having done it *comme il faut* (line 5, 7-8 and 11). I carried on implicitly (lines 9-10 and 12-13), attempting to make her reason upon what she had accomplished, which she positively responded (lines 14-15), showing that the concept was on the way to internalization. Her wording was very similar to the one I had employed when mediating her, showing that it was as if she were

imitating my speech, idea reinforced by line 20 ("Because you told me"), which, in VSCT, is considered as a step into self-regulation. Vygotsky stated that "development made on collaboration and imitation is the source of all the specific human characteristics of consciousness that develop in the child" (Vygotsky 1987, p. 210). In any case, besides saying what she should have done, Nicole also explained why conducting a link is beneficial (lines 20-22 and 29-32), demonstrating that the concept was making sense to her, a redefinition in the situation-definition.

As previously stated in other instances in this analysis, mediation 4 was different from the others in qualitative terms: as perceived, it was almost entirely implicit, finishing with me asking her a question to support expert's opinion (lines 25-26), and eliciting (line 28), instead of the more explicit approaches employed in the end of other moments of mediation previously presented, showing a maturation of my development while dealing with this pedagogical aspect as well.

Later in the same MS we had another mediation on links, this time reiterating the idea that Nicole still had a pseudoconcept in relation to links: after engaging in a discussion about crazes, Nicole started talking about novels, and then changed the subject to sports, as the next text aimed at expanding vocabulary related to entertainment.

### Excerpt 44: MS 4b

- 1 TE: [after showing the part of the class] What was that?
- 2 N: That was ... the link? To the next ... task?
- 3 TE: yeah, the next task would be... vocabulary... so do you think this link
- 4 was... ok?
- 5 N: I don't really remember, I think on my link I did a kind of modeling?
- 6 TE: Yeah, you continued talking about sports... but the link was from ...
- 7 novels ...to sports.
- 8 N: Ahaam.
- 9 TE: What was the link?
- 10 N: (...) Didn't I say what kind of... I don't know... [TE showed the part of the
- 11 video again] Hmm... I don't know if that's so bad!
- 12 TE: Yeah: Okay... but it's not a link...
- 13 N: Ahh, Ok!
- 14 TE: Why is it not a link? It was supposed to be a link but it's not...
- 15 N: Yeah (...)
- 16 TE: What's the relationship between novels and sports? That would be the
- 17 link...
- 18 N: Nothing! [laughs] I was like, they're both crazes, yeah, let's do that!
- 19 TE: Ah, ok... but...
- 20 N: But yeah, no! [laughs]
- 21 TE: Yeah, you have to see what is the relationship between what I'm
- 22 talking about, and the next topic... so if you talk about... "Oh, have you
- 23 read that book about... Almir Klink... or Pelé... what book teacher? Oh
- 24 the one that talks about soccer"... then, it would be a link.

- 25 N: The thing is, the novel part was not on my plan...
- 26 TE: Yes, I saw that... you stopped, erased the board and started
- 27 thinking...
- 28 N: Well, actually I think... maybe I thought they don't know what novel is....
- 29 It wasn't on my plan to talk about that at all... and that... wasn't the... link... I
- 30 had to link novels to...
- 31 TE: Yeah, there was no link, you started a new topic.
- **32** N: okay!

The twisting path of development Nicole had been going through may be perceived in this interaction: after having shown a more informed understanding of the concept (in the previous MS), she displayed lack of it in this one, even having a hard time understanding why it had not been a link. I tried accessing her rationale through implicit mediation (eliciting, lines 2 and 3-4), but after seeing that she had not grasped where I was aiming at (line 5), I went on indirect explicitly (recalling, lines 6-7), and still realizing Nicole did not perceive, and was even questioning my mediation (lines 10-11) I had to be more explicit, saying that the concept was not present (line 12), which seemed to make her notice it (line 13), inviting me to go on implicitly, (eliciting, line 14). However, she was still hesitant (line 15), which prompted me to be more explicit, clarifying the concept (lines 16-17), causing her to finally seem to have understood what I was talking about (lines 18 and 20). Realizing that she had finally understood, I ended the mediation explicitly clarifying the topic (lines 21-22 up to "topic") and giving examples (lines 22 from "oh" to 24). My mediation here was contigent on her needs, which is a sign that I was more aware of the impact of the mediational moves I was engaging in.

Another important element was in-flight decisions (decisions taken up by teachers during the class, which had not been planned) influencing Nicole's practice: when she got out of her class plan, she had difficulty perceiving or coming up with *links* (line 25 and 29-30). This fact, added to all the instances in which she was hesitant (asking instead of stating, lines 2, 5 and 10) also signals that the concept was not internalized yet, and had even gone backwards in the winding road of concept development.

In MS 5 there was improvement on the aspect again. Nicole was supposed to conduct a listening task about places kids go to on their free time, and she started talking about it with the students, linking to the task on the book. Here's how the MS went:

# Excerpt 45: MS 5a

- 1 TE: So, that was the...
- 2 N: Hmm link? Not so good...
- 3 TE: It was fine.
- 4 N: Okay then...
- 5 TE: Because of the interruptions, it was not perfectly... smooth, because

- 6 they interrupt so much with... [...] because you said: "well, you go to
- 7 friend's house, grandma's house, etc., where do you think American kids
- 8 go?" Then you would say: "Let's..." and then they started talking about
- 9 birds, and stories about hunting, and then you forgot the sentence that
- 10 lead them to turn the page... maybe you could've said it again: "So, let's
- 11 see where kids in the USA go".
- 12 N: Okay!
- 13 TE: Ok? But you started really well, asking them where they go, and then
- 14 to the book... ok? But the links are there!

Nicole's confidence in what she had been doing concerning *links* had perhaps been shaken due to our last MS, when she realized she had not performed a link, therefore in this MS she seemed to be more doubtful about her practice than in the previous one: even having performed a link, she did not perceive it as a good one (line 2), which led me to conduct a more explicit mediation (recalling, lines 6-10 up to "page", and giving suggestions line 10 from "maybe" -11), ending with a compliment, as an attempt to lift her spirits, possibly causing her *perezhivanie* to be more positive concerning this pedagogical aspect.

This feeling still persisted in MS6. Although Nicole had performed a smooth link, she did not realize that when I showed her the video. The class was about internet safety tips, and the MS was the following:

#### Excerpt 46: MS 6a

- 1 TE: So, what... what happened here?
- 2 N: It was *instructions*.
- 3 TE: Uh-huh, between one task and the other, now you went to the second
- 4 task, okay, so this was the link, yeah, do you think the link was smooth?
- 5 N: No.
- 6 TE: No??
- 7 N: No... I just... "Guys, guys, you know we have the..." I don't know...
- 8 TE: They were talking about Facebook, saying...
- 9 N: Yeah! Ok, it was. I just didn't like the end, I didn't like the task.
- 10 TE: Yeah? Why not?
- 11 N: Because it went against everything we had just talked about...

Despite the fact that the flow from one task to the other was smooth in this class, Nicole did not recognize it, perhaps because she did not like the result of the subsequent task. (In a previous class, students had been discussing internet safety, the do's and don'ts of social networks, but when they filled out their profile pages on the LI's social network- the class now analyzed- they failed to use those rules). My mediation here attempted to make her realize that she was on the right path, so, after starting implicitly (eliciting, line 1), and getting an incorrect response, (line 2), I cleared up the concept (lines 3-4 up to "yeah"), and elicited

again (line 4, from "do" on). By her negative response, I tried more explicitly to make her realize that it was a smooth link (recalling, line 8), which appeared to have caused her to realize that it was good (line 9 - "Yeah! Ok, it was"). What we can observe here is Nicole's performance preceding competence (CAZDEN, 1981), in which she was able to enact the concept in class, yet failed to name what she was doing; hopefully, it is by using it that Nicole will appropriate its meaning.

Later in the same MS we talked about links again. This time, Nicole went from one activity to the other without providing a connection between the activities, which was the topic of our interaction:

#### Excerpt 47: MS 6b

- TE: Here you were closing up a discussion about internet safety, and then
- 2 you broke it and started talking about the papers... what was missing
- 3 here?
- 4 N: The linnnk! Yeah, of course... I should've done something like: "Oh, ask
- 5 me for one more tip", like "What else do you think we could... do"
- 6 TE: Yeah, you were going from task 1, discussing if you agree or disagree,
- 7 to task 2, which is: [reading from book] "talk to your friends and add
- 8 more tips to the list"
- 9 N: Yes! I think I should've asked maybe for one more tip, and then ahh... and
- 10 then take "so...", if the papers were (inaudible), so, if the person you have ahh,
- 11 so if you guys can find new tips, so...get in pairs... yeah, I didn't realize that
- part. I just thought "Oh,my God, what did I do with these papers", I didn't
- 13 realize that... was missing...
- 14 TE: Yeah, because you have a task, the task was the introduction of the
- 15 unit, "Tuning in", when you introduce the topic of the unit, yeah? So, this
- 16 is one task, right, the 2 pages. In one task, you have different activities, so
- 17 there's also the need of a link within the task, with the activities, you
- 18 know? From activity 1.1 to activity 1.2... you get it?
- 19 N: yeah, I see it.
- 20 TE: So, there was a ... stop and then you go like "What, what are we
- 21 doing? Ah, ok, we're going to the next"...
- 22 N: A chunk.
- 23 TE: When I watched (the class) I saw that the flow was broken.
- 24 N: Yeah...

Even not having performed a link in this part of the class, Nicole promptly realized that it was missing just by my initial indirect explicit (recalling) and implicit mediation (eliciting, lines 2-3), which had not happened before. It is visible that our situation-definition of the concept of links was very similar, showing signs of how our intersubjectivity level had increased from the first MS to this one. On top of that, my second mediational strategy, indirect explicit (recalling, lines 6-8), seemed to have triggered Nicole's reasoning, going back to her class and proposing a way to cope with the problem presented here. Previously, it was me who gave her suggestions and examples, and this time she herself came up with them. The development of the concept had a breakthrough in this MS: only by my indirect explicit

mediation she acknowledged what was missing, and gave suggestions to remedy the mistake; that is, from a pseudoconcept, we can detect that the scientific concept was starting to get internalized (she could talk about it in theory). To make the concept a little clearer, and to ascertain that our situation definition was on the same page, I explicitly clarified the concept (lines 14-18). Her choice of words ("a chunk", line 22) indicates that her wording was very similar to mine, as I had previously used the very same word to explain lack of links, also showing how our intersubjectivity level had evolved. It is worthy pinpointing by now I had also developed towards providing her with directed, goal-oriented and systematic mediation.

In class 7, Nicole performed a link that was effective, and this was brought to discussion in the mediating session:

#### Excerpt 48: MS 7a

- TE: So, here you were talking about something, you were contextualizing,
- 2 yes, and then you linked to the ... listening, yes? And this is something that
- 3 you did that you didn't do before, do you realize this?
- 4 N: Yeah!
- 5 TE: Before you'd just "Ok,let's listen". Now you said "What do you think
- 6 is gonna happen?" yeah, maybe this, and you eliciting from them, and then
- 7 they listened with a goal, yeah, and this is something that was different.
- 8 This is one pre-listening strategy that is predicting, ok, the name of this is
- 9 predicting.
- 10 N: Ok! (...) but, still, it's not too short?
- 11 TE: No, because they had all talked about it...
- 12 N: Ah, ok!

In this interaction, mingling links and contextualization depicts how Nicole was able to link from one activity to the other effortlessly, which indicated that the scientific concept, seemingly clear for her, was also present in practice. My mediation here was indirect explicit (recalling, lines 1-2 and 5-6 and naming, lines 8-9). However, despite having performed an efficient link in class, her uncertainty concerning the aspect came up at the end of this interaction, with her answering with a question (line 10), which hints at her need to feel more secure concerning links.

The next interaction we had about links in this MS also showed a development in the concept:

#### Excerpt 49: MS 7b

- 1 TE: So, what was missing from...
- 2 N: A link!
- 3 TE: A link [laughs]. Ok, go ahead.
- 4 N: I couldn't... I didn't think of one at the time...
- 5 TE: OK, but when you were teaching, you thought, or not?

- 6 N: When?
- 7 TE: When he finished talking about "going to"... did you think "oh, now I
- 8 have to link or "now I have to talk about the class"
- 9 N: Yeah, no, I felt like I needed one, but I'm like crap, I can't think of one...
- 10 TE: it's like blank, blank, blank and then you decided...
- 11 N: Yeah, I think I even stopped for a moment and I was like "Ahh, ok"
- 12 TE: Uh-huh, you did it!
- 13 N: And then I was like "Oh, no, there's not *gonna* be one here, sorry Paola"
- 14 TE: OK, sorry study! [laughs], no link... but you thought about it...
- 15 N: Yeah!
- 16 TE: Ah, that's interesting, because in the beginning you didn't even
- 17 consider, right? Now you're like "I have to do a link" hummm, fail, but I
- 18 thought about it.
- 19 N: No, I did, I did

This mediation shows that the situation definition of the concept of links had been redefined in the teacher's conceptual framework: she was confident of her answer (line 2), which differs from the last interactions, in which she was still hesitant. However, at times she did not perform it, even in the same class, which might have been indicative that "the use on the noun was a social use, not a thinking act, a scientific concept that did not descend to achieving spontaneous knowledge, thus an empty word, a noun not internalized, perhaps a pseudoconcept." (BIEHL, 2016, p. 129). The strategies used were mostly implicit (eliciting, lines 1, 5), mingled with indirect explicit (recalling, lines 7-8, 10), besides reassuring that Nicole was in the right direction (lines 14 and 16-18), trying to cause her *perezhivanie* to be positive.

In the last attended class, Nicole performed a link in class, but it was broken due to a student's interruption, and she failed to recall the link, having the flow interrupted:

### Excerpt 50: MS 8

- 1 TE: So, what was this moment?
- 2 N: It was supposed to be a link [laughs] to the next task... but I love S2, don't
- 3 blame him
- 4 TE: [laughs] What happened? What happened to the link?
- 5 N: It was screwed, it was over! But I don't know, I like him...
- 6 TE: I like him too! So, the link was broken.
- 7 N: Yeah
- 8 TE: Because...
- 9 N: Because... first of all he wanted to tell a joke, and then I made him talk in
- 10 English, and I said "you can do it in the end of the class if you think in
- 11 English". But then he thought about it and I forgot that I had said he could do it
- 12 in the end of the class... and I just let him do it.
- 13 TE: But, you felt that the link was broken...
- 14 N: Yeah, yeah I did, but...
- 15 TE: You enjoyed the joke...
- 16 N: Yeah, exactly! I did!
- 17 TE: What was the consequence, for the class, was there a consequence?
- 18 N: Yeah, they lost the...how do you say in English, the flow...
- 19 TE: The track, like "OK we're going to do this, oh, wait, S2 is going to do
- 20 something". And then, "what were we going to do again?" So you had to
- 21 remind them...

- 22 N: Yes! And I thought at the time, maybe I leave them on the floor, I give
- 23 instructions, then I go back ... but then I thought, in my defense, that I was
- 24 sick, and I thought "I don't want these kids to be sick as well", so I just made
- 25 them stay where they were.
- 26 TE: You were protecting them!
- 27 N: Yeah, I was protecting them. No, but I see that this part was not good.
- 28 TE: Yeah, in previous classes that we saw, you were the one who
- 30 interrupted the flow, remember? By remembering things in the middle of
- 31 the link. Now you didn't! But you let Ss do it [laughs].
- 32 N: Again... yeah

As the excerpt above illustrates, Nicole realized that she had not performed a link due to the fact that she did not want to interrupt a student talking. Even though she did not have the link, she recognized it, and justified it, which is very different from our first interactions, in which she sometimes did not acknowledge what had been missing in the part of the class shown in the video. In this mediation, my implicitness (eliciting, line 1) was enough to ignite her reflective process (line 2), which went on throughout this excerpt (lines 14, 18, 27), with me attempting to implicitly conduct her reasoning process by inviting her to reason upon what had happened in class (eliciting, lines 4, 8, 17), and also indirect explicitly (recalling, lines 19-21 and 28-31). In the end of this interaction, Nicole justifies her lack of link with a "health reason" (lines 23 from "but"- 25), which was why she felt at the time broke the link. I ended the mediation by reminding her about what had happened in previous classes, a recurring issue of having the link interrupted, which she agreed with (line 32).

As far as the concept of links was concerned, the following systematical configuration was noted:

Table 9: Frequency of strategies employed in the pedagogical aspect Link. \* (number of occurrences/ total number of interactions)

More frequent	Frequent	Less frequent	
Repeatedly employed	Occasionally employed	Rarely employed	
<ul> <li>Eliciting (32/108)*</li> <li>Recalling (29/108)</li> <li>Explaining/ clarifying the concept (22/108)</li> </ul>	<ul> <li>Giving suggestions/examples/say ing what should have been done (10/108)</li> <li>Asking question to support expert's opinion (8/108)</li> </ul>	<ul> <li>Naming (5/108)</li> <li>Reading from the material (2/108)</li> </ul>	

Source: the author

Although at first the concept of link had seemed easier to grasp, Nicole kept having some difficulties performing it in later classes. Importantly, in every class there were many more moments in which successful links were there, however, they were not commented in the mediation sessions, and as this is a qualitative study, they have not been "counted" for the overall appreciation of the analysis. What we can perceive is that Nicole had devised links in her class plans, presented having it clear in naming and in most of her practice. Vis-à-vis the systematicity of this concept, similarly to contextualization, there was a preponderance of implicit strategies (37% of times), as opposed to explicit strategies (29,6% of times), while indirect explicit strategies were also frequent (33.4% of times). Alike *contextualization*, the most employed strategy in *links* was *eliciting* (29.6%), followed by *recalling* (26,8%), and *explaining/clarifying the concept* (20.3%), which may demonstrate that the concept of links was also more easily understood than the first ones (instructions and modeling), and thus more implicit strategies were enough to trigger Nicole's reasoning.

One of the aspects dealt with was the failure in having links due to students' and her own interruptions, which might have been an indication that she did not perceive this concept as crucial to conducting a good class, or maybe that she wanted to seize the moments when students brought up topics, irrespective of when they did, failing to carry on a logical sequence for the flow of the class. It was evident from the excerpts presented, that the definition of the situation-definition concerning links had increasingly become redefined, with our intersubjectivity reaching a higher level at the end of the eight sessions: in some initial moments, I had to guide her through the rationale of the concept, with explicit mediation taking place. In our later sessions, my mere implicit eliciting was invariable enough to ignite her reflective process, when the concept was seemingly clear for her, at least as far as the scientific concept was concerned (in theory). This shift in the mediation configuration may also have taken place due to the fact that after MS 3, I started to pay more attention to what I was doing in terms of explicitness and implicitness, which shows my development as a teacher educator and learner of the concept and use of "responsive mediation".

Since this was our last interaction, we are left to wonder whether Nicole was able to have a true concept when coming up with links. However, the reflection she had been through in our sessions, guided by focused, goal directed, continuous, responsive mediation paved a path in which she can hopefully rely on when confronted with questions regarding this issue.

# 4.5 OVERVIEW OF THE ANALYSIS

Having analyzed the four pedagogical concepts separately, it is important to provide an overview of the mediational configuration presented. The systematicity of the concepts presented similar results, though showing some discreet tendencies, as demonstrated in the following table:

Table 10: summary of the frequency of strategies used

Concept	More frequent	Frequent	Less frequent
	Repeatedly employed	Occasionally employed	Rarely employed
Instructions	<ul> <li>Recalling (36/130)</li> <li>Eliciting (29/130)</li> <li>Explaining/ clarifying the concept (25/130)</li> </ul>	<ul> <li>Giving examples/ suggestions/ saying what should have been done (13/130)</li> <li>Naming (12/130)</li> </ul>	<ul> <li>Reading from the material (8/130)</li> <li>Asking question to support expert's opinion (6/130)</li> <li>Reading from the Teacher's guide (1/130)</li> </ul>
Modeling	<ul> <li>Explaining/ clarifying the concept (30/137)</li> <li>Recalling (29/137)</li> <li>Eliciting (29/137)</li> <li>Naming (21/137)</li> </ul>	<ul> <li>Giving examples/ suggestions/ Saying what should have been done (15/137)</li> <li>Asking question to support expert's opinion (8/137)</li> </ul>	<ul> <li>Reading from the material (4/137)</li> <li>Reading from the Teacher's guide (1/137)</li> </ul>
Contextualization	<ul> <li>Eliciting (40/122)</li> <li>Recalling (31/122)</li> <li>Explaining/ clarifying the concept (14/122)</li> </ul>	<ul> <li>Asking question to support expert's opinion (11/122)</li> <li>Naming (10/122)</li> </ul>	<ul> <li>Giving examples/ suggestions Saying what should have been done / (7/122)</li> <li>Reading from the material (7/122)</li> <li>Reading from the Teacher's guide (2/122)</li> </ul>
Links	<ul> <li>Eliciting (32/108)</li> <li>Recalling (29/108)</li> <li>Explaining/ clarifying the concept (22/108)</li> </ul>	<ul> <li>Giving suggestions/examples/sa ying what should have been done (10/108)</li> <li>Asking question to support expert's opinion (8/108)</li> </ul>	<ul> <li>Naming (5/108)</li> <li>Reading from the material (2/108)</li> </ul>

Source: the author

Systematically speaking, when comparing the concepts that presented an earlier and easier development (contextualization and links) to the ones that presented a later and more challenging development (instructions and modeling), there was a discreet tendency to the employment of explicit strategies over implicit ones in the latter group (31.75% explicitness over 27% implicitness), being indirect explicit strategies the most frequent ones (37.8%); on the other hand, in the former group, there was a tendency to use more implicit strategies (39.4%) over explicit ones (24.2%), with indirect explicit strategies again the most frequent ones (41,25%). Concerning individual strategies, the three most employed ones were *eliciting* (26%), *recalling what happened* (25%), and *explaining/clearing up the concept* (18%) of the total number of strategies, which showed a trend of implicitness over explicitness as far as individual strategies were concerned, yet a balance between the three categories of analysis (Implicit/indirect explicit/explicit).

As pointed out in the studies conducted by Aljaafreh and Lantolf (1994) and Golombek (2011), the mediational configuration using DA analysis aims at developing teacher reasoning by using the systematically joint exchanges between teacher educator and teacher in order to develop awareness of pedagogical choices undertaken by the teachers. The suggested protocol pointed out by Aljaafreh and Lantolf (1994) claims that initial implicit attempts ought to be made prior to explicit ones, so as to verify the range of the mediatee's dynamic ZPD, a process of "continuous assessment of the novice's needs and abilities and the tailoring of help to those conditions" (p. 468). It could be argued that for the group of concepts that needed more explicitness, there was a later development of the concepts (instructions and modeling), while for the group where more implicitness was present (contextualization and links), there was an earlier development, signaling that Nicole's ZPD level was different for the two groups. Other restraints observed in the former group (instructions and modeling) were the beliefs that emerged along ("modeling/instructions takes time", "the students were too good for modeling"), as well as confusion between what modeling and instructions were, what might have delayed a more prompt development.

In any case, as stated by Aljaafreh and Lantolf (1994), any change in the type of mediation a person needs also indicates development, which is triggered by the expansion of an individual's ZPD, when strategically mediated (WERTCH, 1985): it is paramount to adjust the level of implicitness and explicitness to the learner's capabilities, instead of just considering one's performance right or wrong. Nevertheless, Lantolf and Aljaafreh (1995)

point out that development in the ZPD is not smooth and foreseeable, but twisting, entailing both progress and regression, with the learner responding appropriately to a certain type of mediation on one occasion and inappropriately on another, up to the point when they are able to self-regulate. (POEHNER & LANTOLF, 2005) This could be perceived during Nicole's trajectory in the development of the four concepts studied, as well as in my own path towards developing awareness of what responsive mediation should look like, with earlier MSs more formulaic and later ones more implicit.

Having analyzed the four pedagogical aspects separately, with their particular nuances and peculiarities, I will present the final remarks in the next section.

#### **5 FINAL REMARKS**

# 5.1 INTRODUCTION

Investigating the path of a teacher educator while mediating a novice teacher's development of pedagogical concepts was a challenging task I set out to accomplish in this study. Focusing on myself, perceiving failures and missed chances of effective transformative mediation was difficult, yet enlightening: it is through reflection and reasoning that we, as the educators of teachers-to-be or current teachers, have the chance to walk our talk. On the other hand, perceiving the points in which the mediation was spot on, contingent to Nicole's needs, systematic and goal-oriented was gratifying, when all the hard work I put into this study paid off, given the developmental path she and I underwent.

This said, I introduce this final chapter, which is divided into three sections that aim at concluding the present study: Section 5.2 summarizes its main findings, bringing the research questions to discussion; Section 5.3 offers the limitations of the study, as well as providing suggestions for future research; and Section 5.4 brings about pedagogical implications that can be inferred from the study's main findings.

#### 5.2 MAIN FINDINGS

The purpose of this research was to investigate the mediation configuration used by the teacher educator as compared to the development of the teacher so as to establish a relationship between these two aspects (mediation configuration and teacher development), given that some concepts were more easily understood than others along the in-service. In order to reach this goal, the following research question was designed: "To what extent did the mediation configuration provided by teacher educator impact teacher development?" So as to answer the general question, three specific questions were asked: i) Which pedagogical aspects have been approached along the eight mediating sessions?; ii) What mediating strategies were used by the TE to mediate the teacher along the eight mediating sessions?; and iii) Can we draw a relationship between the pedagogical aspects developed by the teacher and the strategies used by the TE, along with the frequency in which they occurred? If so, what does this relationship look like?

I will start by answering the first two specific research questions, then addressing RQ 3 and finally the main question of this study. Answering the first specific RQ, "Which pedagogical aspects have been approached along the eight mediating sessions?", as explained in the method section, I analyzed all the mediating sessions and listed which pedagogical concepts were tackled in them (both from the guidelines of the LI and others that were eventually raised). Altogether there were 32 pedagogical aspects that were discussed along the eight mediating sessions, some of them only mentioned in one or two occasions, being therefore disregarded due to the claim posed within sociocultural theory discussions that mediation must be prolonged and continuous. In fact, these aspects that were not systematically touched were indeed not developed by the teacher. Thus, I ended up with four aspects, all of them having been addressed in all of the mediating sessions, being that two of them presented an earlier and easier developmental path (contextualization and links), and two presented a later and more challenging development (instructions and modeling).

Addressing the second RQ, "What mediating strategies were used by the TE to mediate the teacher along the eight mediating sessions?", I watched the eight mediating sessions, making a chart of all the strategies I employed in each on the teacher's pedagogical aspects taken along the eight classes, coming down to three categories as far as implicitness and explicitness are concerned: i) Implicit Strategies (Eliciting teacher's reasoning and Asking questions to support expert's opinion; ii) Indirect Explicit Strategies (Recalling what happened in class; Naming the concept and Reading from the material; and iii) Explicit Strategies (Giving examples/ suggestions/ Saying what should be done; Explaining/ clarifying the concept; Showing the suggested guidelines on the teacher's guide.)

As regards the third RQ, "Can we draw a relationship between the pedagogical aspects developed by the teacher and the strategies used by the TE, along with the frequency in which they occurred? If so, what does this relationship look like?", I initially conducted an interpretative analysis of the mediation between the teacher and me, classifying these interactions according to the implicitness/explicitness categories aforementioned, and subsequently making a chart with the frequency in which the strategies were used, both in relation to aspects developed more and less easily the higher and lower instances of development (i.e. for the pedagogical aspects developed sooner or later in the teacher's learning path). The interpretative analysis revealed an intertwinement between implicit and

explicit strategies along the four pedagogical aspects analyzed, without any strong preponderance of one over the other. Systematically, for the concepts that displayed an earlier and easier development (contextualization and links) there was a predominance of the use of implicit strategies (39,4% of times) over explicit ones (24,2%), with indirect explicit strategies being the most frequent ones (41,25%). Nevertheless, for the concepts that rendered a later and more challenging development (instructions and modeling), there was a modest prevalence of the employment of explicit strategies over implicit ones (31,75% explicitness over 27% implicitness, being indirect explicit strategies again mostly frequent (37.8%);). As regards single strategies, the three most used ones were *eliciting* (26%), *recalling what happened* (25%), and *explaining/clearing up the concept* (18%) of the total number of strategies, depicting an interesting result of a continuum from implicitness to explicitness, being these three strategies implicit - indirect explicit -explicit, consecutively; however, as the numbers were not so expressive, it may be argued that there was a harmony between the three categories of analysis.

Finally, answering the main research question, "To what extent did the mediation configuration provided by teacher educator impact teacher development?", differently from my initial assumption when I set out to conduct this study, due to the fact that there was no significant difference between implicit and explicit strategies as it relates to the teacher's development, it can be suggested that, instead of the quality of mediation impacting on the teacher's developmental process, it was the opposite that was noticed: the quality of mediation being impacted by the teacher's ability to understand the concepts at hand, her ZPD level, and her beliefs concerning some of the concepts. The mediation, strategic, in Wertsch's (1985) terms, responsive, in Johnson and Golombek's (2016) conceptualization, dynamic, as perceived in in Poehner's DA (2008), was systematic (with the same concepts being presented and then reintroduced along all the mediating sessions), goal-oriented (guided towards developing the concepts), and contingent to Nicole's needs, being implicit when her level of understanding was enough to grasp the concept being worked on, explicit when her ZPD level, or her future independent functioning (LANTOLF & THORNE, 2006), was still not mature enough to assimilate the concept presented to her, and indirect explicit when she was at an intermediate level of understanding. In accordance with what the literature suggests (LANTOLF & ALJAAFREH, 1995; LANTOLF & THORNE, 2006; ALJAAFREH & LANTOLF, 1994; GOLOMBEK, 2011), the movement from implicit to explicit mediation yields the more expert other to offer mediation that is contingent to and graduated on one's

ZPD. As Poehner and Lantolf (2005, p. 236) point out "[Vygotsky] insisted that responsiveness to mediation is indispensable for understanding cognitive ability because it provides insight into the person's future development", given that within the ZPD mediation is most impacting (OLIVEIRA, 2001). Moreover, the use of DA analysis, aiming at developing teacher cognition by systematically addressing the concepts being worked on, followed the suggested protocol set out by Aljaafreh and Lantolf (1994), where initial implicit attempts should be made prior to explicit ones, as a way to find out the range of the mediatee's dynamic ZPD, a process of "continuous assessment of the novice's needs and abilities and the tailoring of help to those conditions" (p. 468).

Anyhow, Aljaafreh and Lantolf (1994) claim that any qualitative change in the mediation one needs indicates development as well: instead of classifying one's performance as correct or incorrect, it is important to calibrate the level of implicitness and explicitness to one's capabilities. However, as the authors suggest, differently from being a smooth and predictable development, the ZPD is revolutionary, thus entailing a twisting trajectory, moving forward and backwards in the process. Therefore, as Poehner and Lantolf (2005) point out, at times the learner may respond appropriately to a given kind of mediation and inappropriately to another. This phenomenon also happened to Nicole: there were moments in which she seemed to have understood the concepts, performing accordingly in her class, whereas in the following class she failed to apply them. Fortunately, by the end of the eight mediating sessions, all the four concepts analyzed had been developed, with different paths and levels of understanding, since there were sustained opportunities for reflecting upon them and performing them in practice, and corroborating Johnson's (2009) claim that "concepts are not fixed objects but develop dynamically through use, so they are learned over time and formed through the process of synthesis and analysis, while moving repeatedly between engagement in activity and abstract reasoning." (p.20). However, we cannot assume they have been internalized, due to the fact that, after the eight classes attended the teacher was no longer accompanied.

In relation to beliefs, there were two major ones that may have interfered in Nicole's later development of the concepts *modeling* and *instructions*: an idea that their application "takes time", that is, that planning them for the classes is time-consuming, and that "good students do not need modeling", displaying an understanding that the students in that specific

group "knew a lot", so there was no necessity of providing examples on how to conduct tasks. These beliefs, once detected, were brought to light and reasoned upon, and, by showing to her (on her recorded classes) that her practice had been negatively influenced by them, Nicole started to perceive and understand the harmful effect of these beliefs on the students' performance. Yet, it is precocious to assume that she will not continue to resort to them, as beliefs are resistant to change and likely to modify the way teachers perceive their reality, influencing their thinking process, reasoning and pedagogical behaviors (JOHNSON, 1999). On top of that, "the strong affective and evaluative component of teachers' beliefs makes them seem more inflexible and open to critical examination" (JOHNSON, 1999, p. 30). It is our hope that, in her subsequent performance in the shoes of a teacher, she will recall our past interactions about the instances in which those beliefs may have jeopardized her practice and be able to finally overcome them.

It is important to point out that along Nicole's process of development our level of interjubjectivity was being constantly reorganized, with the situation definition of the concepts presented being systematically redefined, a process that happened throughout the mediation that took place. In Wertsch's words,

when interlocutors enter into a communicative context, they may have different perspectives or only a vague interpretation of what is taken for granted and what the utterances are intended to convey. Through semiotically mediated "negotiation," however, they create a temporarily shared social world, a state of intersubjectivity. (WERTSCH, 1985, p. 161).

As perceived in this study, along the mediating sessions, when provided with implicit mediation, Nicole had opportunities to express what she understood by the analyzed concepts, externalizing her reasoning behind the pedagogical choices undertaken in her classes, opening up mediational spaces where I was then able to access her situation definition of the concepts and then externalize my take on those concepts, bringing about a "temporarily shared social world", or a level of intersubjectivity. When perceiving a dissonance between what she and I understood by the concepts, a need for explicit mediation took place, redefining the situation definition of the concepts. The more we externalized our understanding of the concepts, naming them accordingly, the closer our situation definition of the said concepts grew. As Vygotsky affirms, naming "precedes the awareness of the concepts underlying behind these names, but it is by using them and externalizing one's knowledge about them that they become open to discussion and to mediation" (DALLACOSTA, 2018, p. 69). The fact that the concepts were transported from the mediating session to her subsequent classes, that is, from theory (scientific concepts) to practice (spontaneous concepts), made it easier for me to

assess whether the mediation was reverberating in her conceptual framework or not. As said before, we do not know if she internalized the concepts, as this study terminated, and, in Vygotsky's words, "the greatest difficulty of all is the application of a concept, finally grasped and formulated on the abstract level to new concrete situations that must be viewed in these abstract terms." (1989, p.142)

A key point that must be brought about here is the role of emotions in the teacher's *perezhivanie:* in several moments during her trajectory, there were moments in which her self-confidence was shaken by frustration regarding the non- accomplishment of some concepts (especially *modeling* and *instructions*). In these occasions, the way I tried to relent her level of unhappiness towards her performance was by sympathizing with her, lowering her anxiety and motivating her to keep working on the said concept. On the other hand, when realizing her accomplishments, I complimented on her development, aiming at making Nicole feel content about herself. Given the intrinsic relationship between cognition and emotions (VYGOSTKY, 1987b), it is licit to relate the different outcomes concerning the two groups of concepts to the different feelings Nicole had towards them: for the easier group, more positive, motivating interactions took place; for the harder group, more frustrating feelings perpetuated Nicole's verbalizations, which, though I tried to ease up on them by providing motivational utterances, seemed to have caused her to feel bad about her initial practice, what might explain why one group was easier and another one was more challenging as regards to her developmental process.

As Johnson and Golombek (2016) put it, "Our mediation is shaped by the complex interplay of cognition and emotion [...]" (p. 43). At first, I was more formulaic, positivistic, explicit, which, looking back now, might have been because I was trying to show her that I "knew the ropes" of the field, which brings into light how my *perezhivanie* was shaping my mediation. Perhaps in our initial interactions, I was influenced by the image of a teacher educator that I had in mind, possibly molded by my "apprenticeship of observation" (LORTIE, 1975) or by my own experience as a teacher trainer for 10 years prior to this study without a deep understanding of what being a teacher educator entailed.

It was only after the third mediating session that I realized that the kind of mediation I was offering the teacher had different nuances, and, after interacting with a more

knowledgeable other (my advisor), I attempted to be more implicit and less "formula-giver", a change that could be perceived in my later mediation instances (from the fourth one on). In this sense, it seems like I experienced a social collision between the sort of mediation I was offering and the sort of mediation I should be offering to Nicole (i.e. responsive mediation), as the readings I did on VVSCT and TEd, the videos showing how I mediated Nicole, as well the interactions with my advisor made me realize. In other words, it appears that my *perezhivanie* refracted the influences of the social environment on me, reshaping the quality of my mediation.

Only now am I fully aware of such a complex relationship between my *perezhivanie* and my mediation. It is now clear that refracting the mediation offered to me at that time made me experience a dramatic collision between what I can – now – see as responsive mediation and the "non-responsive" mediation I was offering, specifically during the first two mediating sessions. Looking back at it now, I understand the extent to which my practice qualitatively changed and developed. Joyfully, I can say I am able to revisit what happened between Nicole and me through a different lens, these very lens being the critical *perezhivanie* I have developed through this very study, which has allowed me to become mindful of my own pedagogy.

This process was similar to Johnson's and Golombek's (2016), when they state that

By putting our pedagogy under a microscope, we have deliberately sought to unpack what we have fully internalized as L2 teacher educators, and, in true Vygotskian fashion, externalized our own expertise as we seek to cultivate L2 teachers' professional development. Doing so, we believe, has changed our expertise as well, cultivating a higher level of consciousness, a more nuanced understanding of our work, and a mindfulness of what, how, and why we do what we do and its consequences on and for our teachers. (p. 163)

Similarly to the authors, my mindful process began while conducting the mediating sessions for the Master's thesis, developed a little further when writing the Master's thesis, and was consolidated now conducting this Doctoral study, when the focus was on the pedagogical action I took while mediating the participating teacher. By studying about mediation with the examples from my interactions, by categorizing the mediational moves I made, by putting down what pedagogical choices I made while mediating her and systematizing all this, I could join the spontaneous concepts I had before with the scientific concepts I have now concerning responsive mediation, with a deeper understanding of its outcomes. I believe that my future practice as a teacher educator will be highly impacted due

to this study, allowing me to attend to the quality of mediation I undergo and to the importance of responsively calibrating the steps I take along the way,

#### 5.3 LIMITATIONS OF THE STUDY AND SUGGESTIONS FOR FUTURE RESEARCH

To start with, it is paramount to remember that this study was conducted after the data had been collected, with another purpose. Initially, the goal of the data collection was to trace the teacher's development, and the idea to study the quality of my mediation came later, along the process of analyzing the mediating sessions. This had an impact on the type of mediation offered: had I initially set out to conduct the study mindful of my mediation, the results would possibly have been different. Yet, I see this shortcoming as a positive feature of this dissertation, because its mediational configuration was not pre-planned, but rather spontaneous and genuine, bringing extra strength to the study.

A limitation of this study was the fact that, due to the richness of the data, only one participant was addressed. By having more participants within the same context I might have been able to relate the mediational configuration to the possible different or similar outcomes, strengthening the findings encountered in this study. Another setback was that this study was conducted with only one group of students. Had it been conducted with more than one, with the same teacher, maybe could have caused different outcomes, being possible to verify Nicole in different teaching scenarios, however using the same pedagogical concepts; this could not have been done due to time constraints, both from the teacher and mine, and also owing to the fact that this was a case study

Furthermore, Nicole's in-service meetings with me seized at the end of the master's data collection, as we did not continue our mediating sessions, and also because she left the LI, being impossible to trace if the knowledge gained during this study reverberated in her later practice in the shoes of a teacher.

Another setback was that only 4 of 32 pedagogical aspects could be analyzed, due to the criteria adopted (pedagogical concepts should be mentioned in all of the Ms and present different degrees of development). Having more concepts being scrutinized might have helped to perceive the categories of analysis in more diverse scenarios, perhaps finding more relationships of implicitness and explicitness. Another point was the fact that the mediating

sessions were designed by my own perception of Nicole's areas of development, since I was the one who chose the concepts to be discussed and analyzed in the mediating sessions, disregarding issues she might have brought to discussion. As stated in the method session, this was due to time constraints, as a mediating session showing all the filmed classes was too lengthy, thus being difficult to operationalize.

A further issue is the operationalization of a study like this in large scale, such as at university course: it demands effort and time from the teacher educator and the teacher-learner (s), as it is an intensive, longitudinal study that took four months, 10 hours of attended classes, 12 hours of mediating sessions, devising of class plans on the part of the teacher, and of documents like class attendance feedback by the teacher educator, who also watched all the classes again, an average of 40 hours of work only during data collection. Facts like these deem harsh to replicate this study for larger audiences, when adjustments must be made, as far as the length and nature of mediating sessions is concerned.

Therefore, future research in this area might be to replicate this study with larger audiences, devising other mediational procedures, like inviting the participants of the study to mediate each other; this way, there would be collaboration from all participants, with mediation from the more expert others to the ones needing more assistance, with different ZPDs being constantly reorganized. Another suggestion might be to replicate this study with experienced teachers as opposed to novice ones, trying to find a relationship between implicit/explicitness and teacher experience

After discussing the study's limitations and giving suggestions for further research, the next section aims at discussing the pedagogical implications that can be raised by this work.

#### 5.4 PEDAGOGICAL IMPLICATIONS

The main pedagogical implication of this study is to foment tools for teacher educators to conduct pre or in-service programs with teacher learners. Similarly to a teacher's trajectory when learning how to teach, teacher educators must also have opportunities to reflect on their own practice, in order to understand the way they conduct their practice might affect the teachers they are mentoring. In order to do so, studies in teacher education having as a theoretical basis the sociocultural approach helps the field by aligning the scientific concepts of the theory (the theoretical background of teacher educators) with the spontaneous concepts (the practice of mediating teachers).

Engaging in a reflective process is not an easy task, and it is our job, as teacher educators, to experience this feeling, which we invite teacher learners to take on. Therefore, it is of utmost importance that we attend to what we convey in our interactions with teachers. Taking into consideration the way in which strategic or responsive mediation might promote or hinder teacher reasoning and development, aligned with the role of emotions in the teacher's cognitive functioning is paramount. As Golombek (2015) points out, teacher educators' emotions also influence the mediation they provide to teachers. Researching the way in which teacher educators' emotion and cognition are intertwined with of teacher learners' practice is of utmost importance in empowering teacher education professional development.

Therefore, further studies on teacher educator's role should enrich the professional development experiences of the mediated teacher learners. By being aware of the mediational strategies we may use when interacting with teacher learners, and the way in which these practices impact the teacher learner's path, we may better cater for their needs. Enacting responsive mediation takes time and effort from the teacher educator, who should be vigilant to grant the best support for the teacher learner. As Johnson and Golombek (2016) perceived: "It is our hope that by making our pedagogy accessible to others, we have created the theoretical and pedagogical conditions that will promote mindful L2 teacher education." (p. 171). Likewise, I expect that this work may shed light on teacher educators' journey towards developing conscious, mindful, responsive, accurate support to their mentored teachers.

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# **APPENDIX** A – Task Analysis Framework model

GUIDING QUESTIONS FOR CLASS PRAPARATION	
1. By the end of the task, what should students be able to do?	
2. Which of the communicative competences (sociolinguistic, grammatical,	
discourse or strategic) is/are the focus of the task?	
1. What kind of input data is available for students to accomplish the task?	
2. Besides the book, what sources of information can be explored/ used?	
1. How are students going to work? Individually, open pair, pair work, small	
groups? Why? What for?	
2. How are you going to change the setting configuration?	
3. What kind of interaction will this task generate? Teacher (T)-students	
(Ss)? Ss- Ss?	
1. How are you going to tell the Ss what they are expected to do? (i.e. will	
Ss read, silently or aloud; will you explain the instructions?)	
2. Are instructions clear and brief?	
1. How are you going to set the mood for the activity and contextualize it?	
2.Do Ss perceive the goals of the task?	
3. Will there be modeling? How is it going to be carried out? Why?	
4. How can information brought up by Ss be incorporated into the lesson?	
1.Do Ss work at their own pace?	
2.How will you deal with early finishers?	
In what occasions do you think you might interrupt Ss' performance?	
1. How are the learning results evaluated?	
2. How do Ss share the outcome of their learning?	
How is the task linked smoothly into the next task?	
1. Is the homework assigned by the teacher related to the goal of the class?	
2. Do you explain/ model the homework	

# **APPENDIX B-** COFs - Classroom Observation Forms

# B.1. CLASS OBSERVATION FORM BASED ON TAF Class: 1 (March, 19<sup>th,</sup> 2015<sup>,</sup>)

STEP	GUI	DING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goal	s of the task achieved? If	1. Class objective seems confusing, a lot of different
	not, has Teacher	(T) realized it/ done	activities whose goals are to make students work
	anything to come	e around that?	and promote critical reflection of the topic (eating
Objectives	2. Was the comm	nunicative competence(s)	habits, weird food, diseases associated to bad eating
(What for?Why?)	anticipated in the	e TAF contemplated? If	habits).
	not, why? Has T	realized that?	2. No, T failed to provide them on most TAFs, only
			on 1 (out of 4). In one TAF, she mentioned having
			problems with this.
			Video, questions on papers (given on previous
Input Data	What kind of inp	out data did T make use of?	class), pictures, papers with text, text written by
(What to use?)	For what purpos	e?	students, slips, blank paper (menu), book, board,
			internet.
	1. What setting v	was used? Why? What for?	1. From the 7 tasks, only 1 was done in pairs. 6
	2. Did T change	the setting configuration	were done individually and 1 as a role play,
Setting/ Grouping	during the class?	,	involving all the group.
	3. Did the kind o	of interaction generated	2. Twice in seven tasks.
	serve its purpose	es?	3. Students lacked to work collaboratively, asking
			each other about vocabulary and ideas.
	1. How did T tel	l Ss what they were	1. In all 7 tasks, T explained in English what Ss
Instructions	expected to do?		were supposed to do.
	2. Did Ss unders	tand the goal of the task?	2. Ss understood what was to be done.
	3. Were the instr	ructions clear/ brief?	3. Instructions were clear, but T could explain
			before giving out papers/ slips.
		1. Did T set the mood for	1. T elicited from Ss if they remembered the video.
		the activity and	No contextualization.
		contextualize it?	2. Ss understood what they were supposed to do.
		2. Did Ss perceive the	3. There was no modelling in any of the 7 tasks.
	Preparation	goals of the task?	4. Yes, but rarely and not explored. T preferred to
		3. Was there be	talk about her own experiences.
		modeling? Was it	
		effective?	
		4. Was information	
		brought up by Ss	
		incorporated into the	

		lesson?	
		1. Did Ss work at their	1. Yes, but sometimes T. hurried Ss to finish.
		own pace?	2. She didn't. They just waited for the others to
		2. How did T deal with	finish
	Performing	early finishers?	3. She interrupted when requested, in order to
		3. Did T interrupt Ss'	provide vocab
Procedures		performance? Why?	
			1. Task 1: eliciting answers to questions in OG.
		1.How were the learning	Task 2: asking Ss to read what they wrote, and the
		results evaluated?	others to come up with suggestions about it. Task 3:
			T asks about the content of the reading passage and
	Accountability	2.How did Ss share the	shows a pic of hers. Taks 4: T asks Ss to read the
		outcome of their	menu. Task 5: T asks which food they prefer (from
		learning?	the book), but failed to explore the questions on task
			2 (p 13). Task 6: role play was interrupted because
			boy had to leave Task 7: T elicits what they found
			and talks about posters.
			2. By answering the questions, reporting their
			findings and text.
	l	Was the task linked	No. There was no link from one task to the other.
Link to the	next task	smoothly into the next	
		task? How?	
		1. Was the homework	1.Yes.
		assigned related to the	
Related Homework		goal of the class?	
		2. Did T explain/ model	2. Yes, explain; No, model.
		the homework?	

# MAIN POINTS MENTIONED IN THE MEDIATING SESSION:

- 1. 3 phases: good accountabilities, but poor preparations. Pay attention to contextualization, warm up, links and modelling.
- 2. Too many tasks in one class: respect students' pace, explore more the tasks, bringing the discussion to their realities.
- 3. Early finishers: How can teacher make the most of class time?
- 4. Importance of changing setting in a class.
- 5. Awareness of communicative competences.

STEP	GUIDING QUESTIONS		TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goal	s of the task achieved? If not, has	1. T Ssill shows lack of focus on the goal of
	Teacher (T) realized it/ done anything to come		the task, needs to look at the teachers' book to
Objectives	around that?		clear this up, but showed a little improvement.
(What for?Why?)	2. Was the	communicative competence(s)	2. T failed to provide communicative
	anticipated in the TAF contemplated? If not, why? Has T realized that?		competences.
Input Data	What kind of in	put data did T make use of? For	Book, CD, posters.
(What to use?)	what purpose?		
	1. What setting v	vas used? Why? What for?	1. OG, PW, IW.
	2. Did T change	e the setting configuration during	2. Yes
Setting/ Grouping	the	class?	3. Yes, and due to lack of Ss in class limited
	3. Did the kind	of interaction generated serve its	options
	purposes?		
	1. How did T to	ell Ss what they were expected to	1.T told Ss what to do in all the tasks.
Instructions	do?		2. Yes
	2. Did Ss und	lerstand the goal of the task?	3. Yes
	3. Were the instructions clear/ brief?		
		1. Did T set the mood for the	1. Yes, by eliciting from Ss what they
		activity and contextualize it?	remembered from the previous class (*visual
		2. Did Ss perceive the goals of	aids-should), besides providing links between
	Preparation	the task?	almost all the tasks
		3. Was there be modeling? Was	2. Yes
		it effective?	3. No
Procedures		4. Was information brought up	
		by Ss incorporated into the	4. Yes
		lesson?	
		1. Did Ss work at their own	1. Yes
		pace?	2. There was not, they were working together
		2. How did T deal with early	
Perfor	Performing	finishers?	
		3. Did T interrupt Ss'	3. Just when requested
		performance? Why?	
		1. How were the learning results	1. By checking answers and expanding the
	Accountability	evaluated?	conversation to Ss' reality
	Accountability	2. How did Ss share the outcome	2. Reporting- talking about themselves
		of their learning?	
	<u> </u>	Was the task linked smoothly	Yes, most of the time. By saying something
Link to	the next task	into the next task? How?	that related to the next task.
[			

	1. Was the homework assigned	1. yes, but T needs to explore the RB and
	related to the goal of the class?	ное.
Related Homework	2. Did T explain/ model the	2. Yes
	homework?	

# MAIN POINTS MENTIONED IN THE MEDIATING SESSION:

- 1. Visual aids- importance of contemplating Ss with different learning styles. Write on board and show them the book;
- 2. Pay attention to the goals of the different sections in the book
- 3. Improvement on links, but still no modelling;
- 4. Careful not to bore students, dragging the activity for too long;
- 5. Explore the resources offered by the school (site and workbook).

# B.3. CLASS OBSERVATION FORM BASED ON TAF -Class: 3 (April, $9^{th}$ )

STEP		GUIDING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
			1. T failed to understand the procedures of
	1. Were the goa	ls of the task achieved? If not, has	1 task and one of the linguistic goals of the
	Teacher (T) rea	alized it/ done anything to come	class: asking "what's the weather/climate
Objectives	around that?		like". T needs to read the teacher's book
(What for?Why?)	2. Was the	communicative competence(s)	carefully before planning the classes.
	anticipated in	the TAF contemplated? If not,	2. T failed to provide the communicative
	why? Has T rea	lized that?	competence in the TAFs (again)
Input Data	What kind of in	nput data did T make use of? For	Book, board, cards
(What to use?)	what purpose?		
	1. What setting	was used? Why? What for?	1. OG, PW.
	2. Did T chang	e the setting configuration during	2.Yes
Setting/ Grouping	the	class?	3. Yes, but could've changed the pairs, and
	3. Did the kind	of interaction generated serve its	not repeated the cocktail format.
	purposes?		
			1.T varied the way of giving instructions,
	1. How did T tell Ss what they were expected to do?		but failed to check comprehension when
			she asked Ss to read them.
Instructions	2. Did Ss understand the goal of the task?		2.Partly.
	3. Were the instructions clear/ brief?		3.yes
		1. Did T set the mood for the	1. Yes, by eliciting from Ss what they
		activity and contextualize it?	remembered from the previous class (*
	D	2. Did Ss perceive the goals of	visual aids-should), besides providing
	Preparation	the task?	links between almost all the tasks
		3. Was there be modeling? Was	2. Yes/ no (last task)
		it effective?	3. No
		4. Was information brought up	4. Yes
		by Ss incorporated into the	
		lesson?	
		1. Did Ss work at their own	1. No
		pace?	2. They just waited.
Procedures	Performing	2. How did T deal with early	3. Just when requested
	1 erjorming	finishers?	
		3. Did T interrupt Ss'	
		performance? Why?	
		1.How were the learning results	1. By checking answers and expanding the
		evaluated?	conversation to Ss' reality

	Accountability	2.How did Ss share the outcome	2. Reporting- talking about themselves.
		of their learning?	Think about how to make it more
			interesting when reporting cocktail format.
		Was the task linked smoothly	Yes, most of the time. By saying
Link to the	e next task	into the next task? How?	something that related to the next task.
		1. Was the homework assigned	1. T assigned RB as
		related to the goal of the class?	homework, but HW was assigned in the
Related Homework		2. Did T explain/ model the	Resource center, so Ss didn't copy it.
		homework?	2. No, T did not even show what the
			homework was, just asked them to do the
			pages on RB.

- 1. Good job in changing setting
- 2. Good use of Visual aids- writing on the board.
- 3. Pay attention to Task procedures/ linguistic goals. Refer to Teacher's book.
- 4. Improvement on links, but still no modelling. Pay attention to task preparation (how to prepare Ss for the task)
- 5. Be careful when assigning Homework: explaining and showing how to do (modelling) is also essential. Explore the resources offered by the school (site and workbook)

# B.4. CLASS OBSERVATION FORM BASED ON TAF -Class: 4 (April, $9^{th}$ )

STEP	GUI	IDING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goa	ls of the task achieved? If not, has	1. T. understood the goals of the tasks, and
	Teacher (T) real	ized it/ done anything to come	from what was written in the TAFS it was
Objectives	around that?		evident T. consulted the Teachers' book.
(What for?Why?)	2. Was the com	municative competence(s) anticipated	2. T failed to provide the communicative
	in the TAF cont	emplated? If not, why? Has T	competence in the TAFs (again)
	realized that?		
Input Data	What kind of in	put data did T make use of? For what	Book, board, realia, CD
(What to use?)	purpose?		
	1. What setting	was used? Why? What for?	1. OG, PW, trio
	2. Did T change	the setting configuration during the	
Setting/ Grouping	class?		2. Yes
	3. Did the kind	of interaction generated serve its	3. Yes
	purposes?		
			1. T. varied the way of giving instructions,
	1. How did T te	ll Ss what they were expected to do?	and checked for comprehension after asking
	2. Did Ss unders	stand the goal of the task?	ss to read silently, by asking them to explain
	3. Were the inst	ructions clear/ brief?	what needed to be done.
Instructions			2. yes.
			3.yes, but a little time consuming (instead of
			showing in the book where ss were
			supposed to work, T. defined what blank
			space was)
		1. Did T set the mood for the	1. Yes, by eliciting from ss what they
		activity and contextualize it?	remembered from the previous class,
		2. Did Ss perceive the goals of the	linking to the new topic
	Preparation	task?	2. Yes
		3. Was there be modeling? Was it	
		effective?	3. No
		4. Was information brought up by	4. Yes
Procedures		Ss incorporated into the lesson?	
		1. Did Ss work at their own pace?	1. Yes
		2. How did T deal with early	2. T. asked them to think of more examples
	Performing	finishers?	3. Yes, T interrupted Ss performance to
		3. Did T interrupt Ss'	explain vocab from the listening. Bad
		performance? Why?	timing.
		1.How were the learning results	1. By checking answers and expanding the

Accountability	evaluated?	conversation to Ss' reality
	2.How did Ss share the outcome of	2. Comparing their answers to classmates';
	their learning?	Reporting and expanding the conversations
		to their realities
		Yes, most of the time. By saying something
	Was the task linked smoothly into	that related to the next task. Still needs
Link to the next task	the next task? How?	polishing, especially related to the flow and
		sequence.
	1. Was the homework assigned	1. T assigned RB as homework, both at the
	related to the goal of the class?	beginning and at the end of the class,
	2. Did T explain/ model the	writing on board.
Related Homework	homework?	2. No.

- 1. Good job in contextualization and links (still needs some adjustments, but it's on the right track);
- 2. Good job in changing setting;
- 3. Good use of Visual aids- writing on the board, realia;
- 4. Improvement on consulting the Teacher's book;
- 5.Improvement on Early finishers;
- 6. Improvement on HW assignment (exploring the materials, writing the pages on board), but still no explanations or modelling;
- 7. Work on preparation: explore pics, elicit vocabulary first, explain/ model the tasks.

# B.5. CLASS OBSERVATION FORM BASED ON TAF -Class: 5 (May, $7^{\text{th}}$ )

STEP	GUIDING QUESTIONS		TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goal	s of the task achieved? If not, has	1. T. understood the goals of the tasks,
	Teacher (T) real	ized it/ done anything to come around	but failed to explore the linguistic
	that?		aspect of the first task.
Objectives	2. Was the comr	nunicative competence(s) anticipated in	2. T failed to provide the
(What for?Why?)	the TAF contem	plated? If not, why? Has T realized	communicative competence in the
	that?		TAFs (again)
Input Data	What kind of input data did T make use of? For what		Book, board, , CD
(What to use?)	purpose?		
	1. What setting	was used? Why? What for?	1. OG, PW, trio
	2. Did T change	the setting configuration during the	
Setting/ Grouping	class?		2. Yes/ no for PW
	3. Did the kind of	of interaction generated serve its	
	purposes?		3. Yes
	1. How did T tel	l Ss what they were expected to do?	1. T. explained (Task 1), but did not
	2. Did Ss unders	stand the goal of the task?	elicit if they had understood. T also
Instructions	3. Were the instr	ructions clear/ brief?	asked them to read and checked for
			comprehension (Task 2).
			2. Some no (first task).Most yes
			3.yes
		1. Did T set the mood for the activity	1. Yes, by eliciting from Ss what they
		and contextualize it?	remembered from the previous class,
	D	2. Did Ss perceive the goals of the	linking to the new topic. T explored the
	Preparation	task?	pics a little, but failed to elicit the
		3. Was there be modeling? Was it	language items on the exercises.
		effective?	2. Yes/ no for first task
		4. Was information brought up by Ss	3. No
		incorporated into the lesson?	4. Yes
		1. Did Ss work at their own pace?	1. Yes
Procedures		2. How did T deal with early	
	Donformin -	finishers?	2. T. asked them to do more exercises.
	Performing	3. Did T interrupt Ss' performance?	
		Why?	3. Just when requested.
		1.How were the learning results	1. By checking answers and expanding
	Accountability	evaluated?	the conversation to Ss' reality
		2.How did Ss share the outcome of	2. Comparing their answers to
		their learning?	classmates'; Reporting and expanding

			the conversations to their realities
			Yes, most of the time. By saying
		Was the task linked smoothly into the	something that related to the next task.
Link to the n	ext task	next task? How?	Still needs polishing, especially related
			to the flow and sequence.
		1. Was the homework assigned	1. No homework assigned, T just
		related to the goal of the class?	reminded Ss to bring it the following
Related Hom	iework	2. Did T explain/ model the	class.
		homework?	2. No.

- 1. Good job in contextualization and links (still needs some adjustments, but it's on the right track);
- 2. Improvement on Early finishers;
- 3. Improvement on consulting the Teacher's book; however, try to read it carefully and see why they suggest doing things;
- 4. Work on preparation: explore more pics, elicit vocabulary first, explain/ model the tasks.
- 5. Study the vocab of the class first, so you won't have surprises in class;
- 6. Don't overestimate Ss (maybe they know a lot of things, but they're studying English so as to learn more. Provide opportunities for this to happen, by modelling, eliciting the vocab on the book, etc.).

# B.6. CLASS OBSERVATION FORM BASED ON TAF -Class: 4 (May, 21st)

STEP	GU	IDING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goa	ls of the task achieved? If not, has	1. T. understood the goals of the tasks,
	Teacher (T) rea	lized it/ done anything to come around	and clearly consulted the teacher's book.
Objectives	that?		2. T failed to provide the communicative
(What for?Why?)	2. Was the com	municative competence(s) anticipated	competence in the TAFs (again); instead,
	in the TAF cont	remplated? If not, why? Has T realized	T wrote on TAF procedures for
	that?		conducting the task.
Input Data	Wh	at kind of input data did T make use	Book, board, slips, computers
(What to use?)	of? For what pu	rpose?	
	1. What setting	was used? Why? What for?	1. OG, trio
	2. Did T change	the setting configuration during the	2. Yes/ no for trio
Setting/ Grouping	class?		3. Yes
	3. Did the kind	of interaction generated serve its	
	purposes?		
	1. How did T tell Ss what they were expected to do?		1. T. explained (Task 1), but did not elicit
	2. Did Ss under	stand the goal of the task?	if they had understood. T also asked them
Instructions	3. Were the inst	ructions clear/ brief?	to read and checked for comprehension
			(Task 2).
			2. Some no (first task).Most yes
			3.yes
		1. Did T set the mood for the	1. Yes, by eliciting from Ss what they
		activity and contextualize it?	remembered from the previous class,
	<b>.</b>	2. Did Ss perceive the goals of the	linking to the new topic.
	Preparation	task?	2. Yes
		3. Was there be modeling? Was it	
		effective?	
		4. Was information brought up by	3. No
		Ss incorporated into the lesson?	
Procedures			4. Yes
		1. Did Ss work at their own pace?	1. Yes
	Performing	2. How did T deal with early	2. T. asked them to do more exercises.
		finishers?	3. T interrupted S's talk to hand out
		3. Did T interrupt Ss' performance?	papers
		Why?	
		1. How were the learning results	1. By checking answers and expanding

Accountability	evaluated?	the conversation to Ss' reality
	2. How did Ss share the outcome of	2. Talking about the questions in OG. and
	their learning?	expanding the conversations to their
		realities
		Yes, most of the time. By saying
	Was the task linked smoothly into	something that related to the next task.
Link to the next task	the next task? How?	Still needs polishing, especially related to
		the flow and sequence.
	1. Was the homework assigned	1. Homework was assigned in the
	related to the goal of the class?	Resource Center, Ss did not write it
Related Homework	2. Did T explain/ model the	down.
	homework?	
		2. Explain, yes. Model, no.

- 1. Good job in contextualization and links; however, pay attention not to interrupt Ss' performance to do something else; there's the need of linking within the task as well;
- 2. Improvement on Early finishers;
- 3. Improvement on consulting the Teacher's book;
- 4. Work on instructions and preparation: when giving instructions, make sure Ss are paying attention, and do it before Ss engage in an activity. Also, model the tasks;
- 5. Don't forget to write new words on board (visual aids);
- 6. Homework assignment: make sure Ss write down what they're supposed to do; find a way of informing all Ss about the homework;
- 7. Make sure correction works on Ss' best intereSs (overcorrecting x undercorrecting)

# B.7. CLASS OBSERVATION FORM BASED ON TAF -Class: 4 (May, 28<sup>th</sup>)

STEP	GUID	ING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goals	of the task achieved? If not, has	1. T. understood the goals of task1, but
	Teacher (T) realize	ed it/ done anything to come around	failed to understand the linguistic goal
Objectives	that?		of task 2
(What for?Why?)	2. Was the commu	nicative competence(s) anticipated in	2. T failed to provide the
	the TAF contemple	ated? If not, why? Has T realized that?	communicative competence in the
			TAFs (again
Input Data	What kind of input	t data did T make use of? For what	Book, board, cards, CD, computers
(What to use?)	purpose?		
	1. What setting wa	s used? Why? What for?	1. OG, PW, individual
Setting/ Grouping	2. Did T change th	e setting configuration during the	
	class?		2. Yes
	3. Did the kind of	interaction generated serve its	
	purposes?		3. Yes
	How did T tell Ss what they were expected to do?		1. T asked S to read and checked for
Instructions	2. Did Ss understand the goal of the task?		comprehension; T explained what to do
	3. Were the instructions clear/ brief?		2.Yes/ sort of
			3.Most of the time, yes. Task 2, no
		1. Did T set the mood for the activity	1. Yes, by eliciting from Ss what they
		and contextualize it?	remembered from the previous class,
	n .:	2. Did Ss perceive the goals of the	linking to the new topic.
	Preparation	task?	2. Yes
		3. Was there be modeling? Was it	3. Yes, for task 1.3 and 2. For task 1.3,
		effective?	yes, for task 2, clearer modeling was
		4. Was information brought up by Ss	needed.
		incorporated into the lesson?	4. Yes
		1. Did Ss work at their own pace?	1. Yes
	Performing	2. How did T deal with early	2. T asked Ss to compare answers.
Procedures		finishers?	3. Just when requested.
		3. Did T interrupt Ss' performance?	
		Why?	
		1. How were the learning results	1. By checking answers and expanding
	Accountability	evaluated?	the conversation to Ss' reality
		2. How did Ss share the outcome of	2. Talking about the questions in OG.
		their learning?	and expanding the conversations to
			their realities
		Was the task linked smoothly into the	Yes, most of the time. By saying

Link to the next task	next task? How?	something that related to the next task.
	1. Was the homework assigned	
Related Homework	related to the goal of the class?	1. No homework assigned
	2. Did T explain/ model the	
	homework?	

- 1. Good job in contextualization and links; however, pay attention not to interrupt the flow of the class (or a link) to talk about something else...
- 2. Improvement on consulting the Teacher's book. For task 1, but failed to understand the goal of task 2. (conditions and consquences)
- 3. Improvement on preparation: pre-listening warm up for topic, explored the pics, read the options before engaging in the listening activity.
- 4. A little improvement on modelling: there was an example on how to do, but T used the same sentence as the exercise and did not model the entire sentence (either on the board or orally). From the TAF, T did not perceive the linguistic goal of Task 2 (use of conditionals).
- 5. Homework assignment: especially for this class, homework was supposed to be assigned, as the goal of the class involved use of conditions with do's and dont's. Homework should always be linked to what Ss are learning.

# B.8. CLASS OBSERVATION FORM BASED ON TAF -Class: 8 (June, 3rd)

STEP	GUI	DING QUESTIONS	TEACHER EDUCATOR
			PERCEPTIONS
	1. Were the goal	s of the task achieved? If not, has	1. T. understood the goals of task, but
Objectives	Teacher (T) real	ized it/ done anything to come around	failed to make clear for Ss (talking about
(What	that?		conditions and consequences)
for?Why?)	2. Was the communicative competence(s) anticipated in		2. T failed to provide the communicative
	the TAF contemplated? If not, why? Has T realized		competence in the TAFs (again)
	that?		
Input Data	What kind of inp	out data did T make use of? For what	Book, board, cards
(What to use?)	purpose?		
	1. What setting v	was used? Why? What for?	1. OG, GW
	2. Did T change	the setting configuration during the	2. Yes
Setting/ Grouping	class?		3. Yes
	3. Did the kind of	of interaction generated serve its	
	purposes?		
	1. How did T tell Ss what they were expected to do?		1. T asked S to read and checked for
	2. Did Ss unders	tand the goal of the task?	comprehension; T explained what to do
Instructions	3. Were the instr	ructions clear/ brief?	2.Ss understood what to do, but not that
			they were talking about conditions and
			consequences
			3. Yes
		1. Did T set the mood for the activity	1. Yes, by eliciting from Ss what they
		and contextualize it?	remembered from the previous class,
		2. Did Ss perceive the goals of the	linking to the new topic.
	Preparation	task?	2. How to do, but not the goal.
		3. Was there be modeling? Was it	3. Yes, but not exactly as the task was
		effective?	(with more than 2 cards), and the example
		4. Was information brought up by Ss	on board had a grammar mistake.
		incorporated into the lesson?	4.Yes
		1. Did Ss work at their own pace?	1. Yes
	Performing	2. How did T deal with early	2. T asked her to do the homework.
Procedures	rerjorming	finishers?	3. Just when requested.
		3. Did T interrupt Ss' performance?	
		Why?	
		1. How were the learning results	1. By checking answers and comparing to
	Accountability	evaluated?	the other group.
	Accountability	2. How did Ss share the outcome of	
		their learning?	2. Reporting what they did.
		l	

	Was the task linked smoothly into	Yes, but it was broken because of S's
	the next task? How?	interruption. By saying something that
Link to the next task		related to the next task.
	1. Was the homework assigned	1. No. It was about the previous class.
	related to the goal of the class?	
Related Homework	2. Did T explain/ model the	2. Yes.
	homework?	

- 1. Good job in contextualization and links (make sure links are not broken with interruptions, though)
- 2. Improvement on modelling: examples written on the board, using a different example from the exercise; however, pay attention not to write a model with a grammar mistake.
- 3. Improvement on instructions: shorter, clearer, with examples; however, try to put yourself in Ss' shoes and see if everything necessary for task completion was explained.
- 4. Pay attention to preparation: besides modeling, T should clarify vocabulary problems before Ss engage in the activity.

**APPENDIX C**: Consent forms

C.1 Consent form for the teacher

#### TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

O(a) senhor(a) está sendo convidado a participar de uma pesquisa de mestrado, realizada pela Universidade Federal de Santa Catarina (UFSC), departamento de Pós-Graduação em Inglês (PPGI), intitulada "Traçando o desenvolvimento do professor: um estudo de caso de um professor iniciante", que fará entrevistas, questionários e filmagens, tendo como objetivo traçar o processo de desenvolvimento de um professor iniciante, ao participar de um programa de formação continuada mediado por um colega mais experiente e, portanto, dispor de oportunidades para desenvolver o Raciocínio (Reasoning), de modo a verificar o grau em que as sessões de mediação entre ele e o formador de professores (a pesquisadora desse estudo) reverbera em seu ensino, bem como em seu discurso. O objetivo secundário refere-se à percepção do professor em relação ao seu próprio desenvolvimento. Serão previamente marcados a data e horário para assistência e filmagens de aulas e de sessões de feedback, utilizando gravações de aula e entrevistas. Estas medidas serão realizadas no Instituto de línguas. Também serão realizados questionários de auto-avaliação. Não é obrigatório participar do estudo, sua natureza é voluntária.

Os riscos destes procedimentos serão mínimos, pois o objetivo do projeto é o de auxiliar o desenvolvimento do professor. Por envolver gravações de aulas e de sessões de feedback, os possíveis riscos são de natureza psicológica, como stress, ansiedade, constrangimento, e desconforto, que serão minimizados com conversas entre o professor e a pesquisadora, antes do projeto, a fim de que o professor se sinta confortável com a pesquisadora; essas gravações serão fundamentais para a percepção do professor sobre sua prática, porém haverá sigilo sobre seu conteúdo, sendo visto somente pelo professor, a pesquisadora e a orientadora do projeto. Além disso, há um possível risco de iminência de conflito de interesses na relação de poder entre a condição de professor iniciante e a direção da escola; esse risco será minimizado com a certificação que os resultados da pesquisa não prejudicarão em nenhuma forma a atuação profissional do participante dentro ou fora da instituição, pois o conteúdo das gravações não será divulgado para o diretor da escola.

A sua identidade será preservada, pois você será identificado por um pseudônimo.

Os benefícios e vantagens em participar deste estudo serão imediatos e a médio e longo prazo, já que você pode aplicar o conhecimento gerado nas sessões de mediação em suas aulas subsequentes. Mais especificamente, o desenvolvimento pedagógico de um professor iniciante, tornando-o mais confortável nas questões envolvidas com a prática pedagógica, mais seguro com relação às atitudes tomadas durante o lecionar, e a sua maturação pedagógica. Os benefícios teóricos serão de informar a prática docente e de formação de professores, principalmente iniciantes, em como o processo de desenvolvimento do professor pode ser maximizado através do acompanhamento do formador de professores, e da reflexão do professor sobre a sua prática.

As pessoas que estarão acompanhando os procedimentos serão os pesquisadores: a estudante de mestrado Paola Gabriella Biehl, e a professora responsável e orientadora da pesquisa Adriana Kuerten Dellagnelo.

O(a) senhor(a) poderá se retirar do estudo a qualquer momento, sem qualquer tipo de constrangimento.

Solicitamos a sua autorização para o uso de seus dados para a produção de artigos técnicos e científicos. A sua privacidade será mantida através da não-identificação do seu nome

Este termo de consentimento livre e esclarecido é feito em duas vias, sendo que uma delas ficará em poder do pesquisador e outra com o sujeito participante da pesquisa.

Agradecemos a sua participação.

Paola Gabriella Biehl - e-mail: paolabiehl@yahoo.com.br.

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#### TERMO DE CONSENTIMENTO

Declaro que fui informado sobre todos os procedimentos da pesquisa e, que recebi de forma clara e objetiva todas as explicações pertinentes ao projeto e, que todos os dados a meu respeito serão sigilosos. Eu compreendo que neste estudo, as medições dos experimentos/procedimentos de tratamento serão feitas em mim, e que fui informado que posso me retirar do estudo a qualquer momento.

Nome por extenso		
Assinatura	Local:	Data:

#### C. 2 Consent form for students

#### TERMO DE CONSENTIMENTO LIVRE E ESCLARECIDO

Você está sendo convidado a participar de uma pesquisa de mestrado, realizada pela Universidade Federal de Santa Catarina (UFSC), departamento de Pós- Graduação em Inglês (PPGI), intitulada "Traçando o desenvolvimento do professor: um estudo de caso de um professor iniciante", que fará filmagens das aulas do seu professor de inglês, tendo como objetivo traçar o processo de desenvolvimento de um professor iniciante, ao participar de um programa de formação continuada mediado por um colega mais experiente e, portanto, dispor de oportunidades para desenvolver o Raciocínio (Reasoning), de modo a verificar o grau em que as sessões de mediação entre ele e o formador de professores (a pesquisadora desse estudo) reverbera em seu ensino, bem como em seu discurso. O objetivo secundário refere-se à percepção do professor em relação ao seu próprio desenvolvimento. Serão previamente marcados a data e horário para assistência e filmagens de aulas. Estas medidas serão realizadas no Instituto de Línguas. Você não é o foco da pesquisa, mas sua participação é importante para que a pesquisadora possa verificar os objetivos supra citados do professor. Não é obrigatório participar desse estudo, sua natureza é voluntária.

Riscos e benefícios do estudo para os alunos: Como o foco da pesquisa é o professor, os riscos em participar deste estudo para os alunos são incidentais (sua participação e imagem não são o foco da pesquisa, somente serão gravadas aulas em que os alunos participam, mas seu desempenho não será analisado nem avaliado), e mínimos, pois sua participação das aulas deverá acontecer de forma natural, uma vez que a pesquisadora não irá interferir na aula, estará somente filmando as mesmas; essas gravações serão fundamentais para a percepção do professor sobre sua prática, porém haverá sigilo sobre seu conteúdo, sendo visto somente pelo professor, a pesquisadora e a orientadora do projeto. Os possíveis riscos podem ser de natureza psicológica, como ansiedade, constrangimento, stress e desconforto. A sua identidade será preservada, pois cada aluno (se necessário) será identificado por um número.

Os benefícios e vantagens em participar deste estudo para os alunos é o desenvolvimento pedagógico do professor, o que poderá melhorar a qualidade do ensino e das aulas, auxiliando na sua aprendizagem, já que os alunos terão aulas com um professor que estará se desenvolvendo pedagogicamente, e assim uma possível melhora no seu desempenho.

As pessoas que estarão acompanhando os procedimentos serão os pesquisadores: a estudante de mestrado Paola Gabriella Biehl, e a professora responsável e orientadora da pesquisa Adriana Kuerten Dellagnelo.

Você poderá se retirar do estudo a qualquer momento, sem qualquer tipo de constrangimento.

Solicitamos a sua autorização para o uso de seus dados, para a produção de artigos técnicos e científicos. A sua privacidade será mantida através da não-identificação do seu nome.

Este termo de consentimento livre e esclarecido é feito em duas vias, sendo que uma delas ficará em poder do pesquisador e outra com o sujeito participante da pesquisa.

Agradecemos a sua participação.

Paola Gabriella Biehl

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#### TERMO DE CONSENTIMENTO

Declaro que fui informado sobre todos os procedimentos da pesquisa e, que recebi de forma clara e objetiva todas as explicações pertinentes ao projeto e, que todos os meus dados serão sigilosos. Eu compreendo que neste estudo, as medições dos experimentos/procedimentos de tratamento serão feitas em meu professor, e que fui informado que posso me retirar do estudo a qualquer momento.

Nome por extenso					
Assinatura	Local:	Data:	/	/	